



Historic Farmsteads Preliminary Character Statement: West Midlands Region



ENGLISH HERITAGE



The Countryside Agency
**Landscape
Access
Recreation**

Acknowledgements

The text of this document was prepared by Jeremy Lake and Bob Edwards with contributions to the national and regional sections from Susanna Wade Martins and additional assistance by Peter Gaskell and Julie Ryan. It was designed by Steve Dent and edited by Nicki Marshall of BiscuitBox Ltd. The research project was commissioned by English Heritage and the Countryside Agency and managed by Peter Gaskell of the University of Gloucestershire. The assistance of the following people is gratefully acknowledged: Freya Edwards and the many farmers and owners of buildings who gave their time to discuss their farm buildings and allowed access for photography.

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.

English Heritage is the Government's adviser on the historic environment. Central to the role of English Heritage is the advice it gives to local planning authorities, government departments and others on the conservation of historic buildings, sites and areas, archaeology on land and underwater, designed landscapes and the historic aspects of the landscape as a whole. English Heritage also has a duty to enhance people's understanding and enjoyment of their heritage and, as part of this, it manages an estate of over 400 historic properties open to the public.

The Countryside Agency is the statutory body working to conserve and enhance England's countryside. The aim of the Countryside Agency's Landscape, Access and Recreation division is to help everyone respect, protect and enjoy the countryside, protect natural landscapes, and encourage access to, enjoyment of and sustainable management and use of the countryside.

In accordance with the Natural Environment and Rural Communities Act 2006, English Nature, the Rural Development Service and the Countryside Agency's Landscape, Access and Recreation division are working towards integration as a single body: Natural England. It will work for people, places and nature with responsibility for enhancing biodiversity, landscapes and wildlife in rural, urban, coastal and marine areas, promoting access, recreation and public well-being, and contributing to the way natural resources are managed so that they can be enjoyed now and for future generations.

The document should be cited as:

Historic Farmsteads. Preliminary Character Statement: West Midlands Region.

Published in August 2006 by the University of Gloucestershire in association with English Heritage and the Countryside Agency.

Copyright 2006 Authors, University of Gloucestershire, English Heritage and the Countryside Agency

The text in this document may be reproduced free of charge in any format or medium without specific permission, subject to the material not being used in a derogatory way. The copyright holders must be acknowledged, and the title of the publication must be included in any published reference.

All photographs and illustrations are individually credited.

Countryside and Community Research Unit
Dunholme Villa
The Park
Cheltenham
Gloucestershire
GL50 2RF

Contents

SUMMARY	6		
1.0 INTRODUCTION	10	4.1.5 1940 to the present	29
2.0 UNDERSTANDING CONTEXT AND CHARACTER	12	4.2 FARMING IN THE WEST MIDLANDS	30
2.1 LANDSCAPE CHARACTER AND CHARACTERISATION	12	4.2.1 Staffordshire Peak District	31
2.2 THE CHARACTER OF THE WEST MIDLANDS REGION: AN INTRODUCTION	12	4.2.2 Cheshire, Shropshire and Staffordshire Plain	31
2.3 THE CHARACTER OF RURAL SETTLEMENT	14	4.2.3 Oswestry Uplands	31
2.3.1 National Framework	14	4.2.4 Potteries and Churnet Valley	31
2.3.2 Rural Settlement in the West Midlands	16	4.2.5 Shropshire Hills	32
3.0 BUILDING MATERIALS	18	4.2.6 Mid Severn Sandstone Plateau	33
3.1 NATIONAL OVERVIEW	18	4.2.7 Cannock Chase and Cank Wood	34
3.1.1 Walling	19	4.2.8 Needwood Forest and South Derbyshire Claylands and Trent Valley Washlands	34
3.1.1.1 Temporary structures	19	4.2.9 Mease/Sence Lowlands	34
3.1.1.2 Mass walling	19	4.2.10 Dunsmore and Feldon	34
3.1.1.3 Timber frame	19	4.2.11 Arden	34
3.1.1.4 Timber cladding	20	4.2.12 Clun and North West Herefordshire Hills	35
3.1.1.5 Corrugated iron	20	4.2.13 Black Mountains and Golden Valley	36
3.1.2 Roofing	20	4.2.14 Herefordshire and Worcestershire Lowlands and Valleys	36
3.1.2.1 Thatch	20	4.2.15 Malvern Hills	36
3.1.2.2 Plain clay tiles and stone slates	20	4.2.16 South Herefordshire and Over Severn	37
3.1.2.3 Corrugated iron and other prefabricated modern materials	20	4.2.17 Severn and Avon Vales	38
3.2 Building Materials in the West Midlands	21	5.0 FARMSTEAD TYPES	39
3.2.1 Walling	21	5.1 NATIONAL OVERVIEW	39
3.2.1.1 Stone	21	5.1.1 Linear plans	41
3.2.1.2 Earth	21	5.1.2 Parallel plans and L-shaped plans	41
3.2.1.3 Timber	21	5.1.3 Dispersed plans	41
3.2.1.4 Brick	21	5.1.4 Loose courtyard plans	41
3.2.2 Roofing	24	5.1.5 Regular courtyard plans	42
3.2.2.1 Thatch	24	5.2 FACTORS INFLUENCING FARMSTEAD CHARACTER	42
3.2.2.2 Slate	24	5.2.1 Farm size	42
3.2.2.3 Tiles	24	5.2.2 Estate policy	44
4.0 AGRICULTURAL HISTORY AND FARM BUILDINGS	25	5.2.3 Local variation of farming systems	44
4.1 AN INTRODUCTION TO ENGLISH AGRICULTURAL HISTORY AND FARM BUILDINGS: THEIR DEVELOPMENT, SURVIVAL AND SIGNIFICANCE	25	5.2.4 Internal workings of the farmyard	44
4.1.1 Up to 1550	25	5.2.5 Development of farming systems	44
4.1.1.1 Survival and value	25	5.3 FARMSTEAD PLANS IN THE WEST MIDLANDS	44
4.1.2 1550 to 1750	25	6.0 KEY BUILDING TYPES: CROP STORAGE AND PROCESSING	46
4.1.2.1 Survival and value	26	6.1 BARNs	46
4.1.3 1750 to 1880	26	6.1.1 National Overview	46
4.1.3.1 Survival and value	27	6.1.1.1 Plan form	46
4.1.4 1880 to 1940	28	6.1.1.2 Size	47
4.1.4.1 Survival and value	29	6.1.1.3 Combination barns	47
		6.1.1.4 Evidence for mechanisation	47
		6.1.1.5 Evidence for reuse and adaptation	47
		6.1.2 Barns in the West Midlands	47
		6.1.2.1 Threshing Barns	47
		6.1.2.2 Combination Barns	49
		6.1.2.3 Mechanisation	50

6.2	GRANARIES	50	7.4	PIG HOUSING	66
6.2.1	National Overview	50	7.4.1	National Overview	66
6.2.2	Granaries in the West Midlands	53	7.4.2	Pig housing in the West Midlands	66
6.3	CART SHEDS AND IMPLEMENT SHEDS	53	7.5	SHEEP HOUSING	67
6.3.1	National Overview	53	7.5.1	National Overview	67
6.3.2	Cart sheds in the West Midlands	53	7.5.2	Sheep housing in the West Midlands	67
6.4	HOP KILNS	54	7.6	DOVES AND POULTRY	67
6.4.1	National Overview	54	7.6.1	National Overview	67
6.4.2	Hop Kilns in the West Midlands	56	7.6.2	Doves and poultry in the West Midlands	68
6.5	HAY BARNs AND OTHER CROP-RELATED BUILDINGS	56	7.6.2.1	Dovecotes	68
6.5.1	National Overview	56	7.6.2.2	Poultry yards	70
6.5.2	Hay barns and other cider houses in the West Midlands	57	8.0	KEY BUILDING TYPES: OTHER FARM BUILDINGS	71
7.0	KEY BUILDING TYPES: ANIMALS AND ANIMAL PRODUCTS	58	8.1	OUTFARMS AND FIELD BARNs	71
7.1	CATTLE HOUSING	58	6.1.1	National Overview	71
7.1.1	National Overview	58	6.1.2	Outfarms and field barns in the West Midlands	72
7.1.1.1	Longhouses	58	8.2	MINOR AND MISCELLANEOUS BUILDINGS	72
7.1.1.2	Ox houses	58	6.2.1	National Overview	72
7.1.1.3	Combination barns	58	6.2.2	Minor and miscellaneous buildings in the West Midlands	72
7.1.1.4	Open-fronted sheds	58	9.0	GLOSSARY	73
7.1.1.5	Lean-tos (outshots)	59	10.0	SOURCES	77
7.1.1.6	Free-standing cow houses	59	10.1	GENERAL SOURCES	77
7.1.1.7	Looseboxes for fatstock	60	10.2	NATIONAL BIBLIOGRAPHY	78
7.1.1.8	Covered yards	60	10.3	REGIONAL BIBLIOGRAPHY	82
7.1.2	Cattle housing in the West Midlands	60	11.0	JOINT CHARACTER AREA DESCRIPTIONS: URLs FOR PDF DOCUMENTS	84
7.2	DAIRIES	63			
7.2.1	National Overview	63			
7.2.2	Dairies in the West Midlands	64			
7.3	STABLES	64			
7.3.1	National Overview	64			
7.3.2	Stables in the West Midlands	65			

Illustrations

Figure 1	Geology & landscape character in the West Midlands	13–14	Figure 18	Isometric view of a large, regular courtyard farmstead in Northumberland and a L-plan dairy farm on the Cheshire Plain	43
Figure 2	Rural settlement in the West Midlands	15	Figure 19	Power in barns: national examples	48
Figure 3	Distribution of cruck-framed and aisled barns	18	Figure 20	Barns in the West Midlands	49
Figure 4	Cruck and aisled barns	19	Figure 21	Interior of a granary showing grain bins and example of a louvered vent	50
Figure 5	Distribution of listed earth-walled agricultural buildings in England	19	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	51
Figure 6	Distribution of listed timber-framed barns in England	20	Figure 23	Granaries and cart sheds in the West Midlands	52
Figure 7	Distribution of listed thatched agricultural buildings in England	21	Figure 24	Distribution of listed hop kilns/oast houses in England	53
Figure 8	Examples of walling materials in the West Midlands	22	Figure 25	Hop kilns in the West Midlands	54
Figure 9	Examples of roofing materials in the West Midlands	23	Figure 26	Hay barns: national examples	55
Figure 10	Distributions of listed farmhouses in England pre-1550 and 1550–1750	26	Figure 27	Distribution of listed cider houses in England	56
Figure 11	Distributions of listed barns in England pre-1550 and 1550–1750	28	Figure 28	Cider-making related buildings and structures in the West Midlands	56
Figure 12	Farmsteads in the landscape: Whixhall, Shropshire (Shropshire, Cheshire and Staffordshire Plain)	35	Figure 29	Principal forms of cattle housing: some national examples	59
Figure 13	Farmsteads in the landscape: Hopton Wafers, Shropshire (Shropshire Hills)	37	Figure 30	Distribution of listed lincages in England	60
Figure 14	Farmsteads in the landscape: Radway, Warwickshire (Dunsmore and Feldon)	32	Figure 31	Isometric drawings of cow sheds	61
Figure 15	Farmsteads in the landscape: King's Caple, Herefordshire (South Herefordshire and Over Severn)	33	Figure 32	Cattle housing in the West Midlands	62–3
Figure 16	Farmstead plan types	40	Figure 33	Interior of a stable	64
Figure 17	Distribution of listed longhouses in England	42	Figure 34	Stables in the West Midlands	65
			Figure 35	Pigsties: national examples	66
			Figure 36	Distribution of listed dovecotes in England	68
			Figure 37	Accommodation for birds: national examples	68–9
			Figure 38	Outfarms and field barns in the West Midlands	71

Summary: West Midlands 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

Broadly, the West Midlands Region is an area of dispersed settlement, except where nucleated settlement predominates in the eastern fringe from Worcestershire east of the Severn to the Trent and other river valleys in Staffordshire. Much of the Region was enclosed by 1750, smaller farms often being concentrated in areas

characterised by early isolated farmsteads. The small hamlets and farmsteads set in the anciently enclosed landscapes of south Shropshire, Herefordshire and Worcestershire are amongst the most intact old landscapes in the country. In many areas, such as the Black Country and common-edge parts of Shropshire, an intensively settled landscape developed with chains of small hamlets associated with industrial activities, such as mining, furnaces and transport. Some remaining areas of heaths, forests and mosses were brought into agricultural use in the late 18th to mid-19th century. Later, regular enclosures are also found on areas of higher ground, such as the upland parts of the Shropshire and Herefordshire Hills.

There was already a strong degree of diversity within the Region by the 15th century: large flocks of sheep in the Peak District and on the Shropshire and Herefordshire Hills, the concentration of dairying and cattle breeding in the north, of beef production in Warwickshire and of mixed arable-based husbandry in other lowland areas such as the Herefordshire plain. In the same century there was a large-scale decline in arable cultivation, and an acceleration in the abandonment and shrinkage of settlements and the amalgamation and growth of holdings. Only in the extreme south of the Region, in Herefordshire, did arable farming continue as a major element of the agricultural economy. There were some strong local distinctions, for example between the Feldon and Arden areas of Warwickshire, the former being an open-field landscape transformed by enclosure by the early 19th century and the latter an ancient wood-pasture landscape of dispersed settlement and comparatively small farmsteads, with the exception of the river valleys where larger arable farms developed.

By the 17th century industry was providing alternative employment and enabling small-scale farming to be combined with other sources of income; for example, in the Shropshire and Herefordshire Hills farming was combined with industrial activities such as quarrying and coal and lead mining. In these areas smallholdings and squatter's cottages could be found fringing and encroaching onto the moorland, which provided common grazing, whilst small fields provided hay meadows.

Except for areas of sheep grazing on the Peaks to the north, cattle were the most important animals kept, mainly for dairying. This was especially the case in north Shropshire and Staffordshire, which effectively comprised a continuation of the Cheshire plain.

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

Across parts of the Region there is a great availability and diversity of stone for building, from the red sandstones of north and east Shropshire and Staffordshire, and the millstone grit of the South West Peak, to the limestones and siltstones found across central Shropshire and into Herefordshire and the red, pink and grey sandstones found across much of Herefordshire.

Red ironstone and Cotswold limestone is found in the south-east corner of Warwickshire, close to the Cotswolds and Northamptonshire Uplands.

Earth-walled buildings, locally known as mud, are found in eastern Warwickshire (mostly in the Dunsmore and Feldon area) using the yellow-brown Liassic subsoil.

This Region, and the adjacent border area of Wales, is especially rich in timber framing, particularly in Herefordshire and Shropshire. Square panel framing is a distinctive regional tradition that extends into the adjacent parts of the North West and South West, as also is the application of weatherboarding as a common form of cladding in combination with tall, stone plinths and gable walls. A similar combination of weatherboarded framing (often in softwood) and brick walls is associated with barns of late 18th- to early 19th-century date. Timber-framed buildings continued to be erected in Herefordshire into the 19th century.

By the 17th century brick was replacing timber framing in many parts of the Region, and is now the typical building material in many areas.

Split sandstone slates are found in the east of the Region, especially in Shropshire and Herefordshire. Welsh slates and clay tiles, the latter manufactured in the predominant brick areas of north Shropshire and Staffordshire, were used from an early date but from the

late 18th century replaced locally produced roofing materials (including thatch) in many areas.

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

Linear plans are distributed across the Region but are most predominant in the north and west. Farmsteads were more commonly planned around yards in a variety of ways. **Loose courtyard** arrangements are associated with large arable-based farmsteads, which would have had two or more barns, most notably on larger high-status steadings and the corn lands and vales of Herefordshire and Worcestershire. Formal courtyard farms were most common on the great estates, particularly in Staffordshire and Shropshire, where they often made major architectural statements. **Regular U- and E-plan yards** are concentrated in the lowland and vale landscapes and in areas where new farms were built on newly enclosed land. By the mid-19th century most farmsteads had informal yards defined by their buildings

that usually comprised an earlier barn, often extended as grain output increased at the end of the 18th century (in arable areas there was possibly a second barn), a granary above a cart shed and a separate cow house and stable block. **L- and T-shaped plans**, with hay barns projecting from the main range, are concentrated in dairying areas, particularly the Shropshire and Staffordshire Plain. Small-scale clusters of buildings are characteristic of small farms in the rural-industrial areas of the Region.

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

The most common type of barn has a central threshing floor; the usual five-bay length being exceeded on larger steadings and in arable-based areas such as the Herefordshire Lowlands and Plateau. Up until the 1840s,

barns of this form continued to be built on new and earlier holdings alike, although increasingly of stone and brick. The requirement for more housing for cattle from the later 18th century, and the increase in the use of mechanisation during the 19th century resulted in barns throughout the Region developing as multi-functional buildings. Wheel houses for horse-powered machinery are found throughout the Region, and are a feature particularly of the larger farms on the Staffordshire and Shropshire Plain, the Mid Severn Plateau and the Shropshire Hills, the high expense of labour in this part of the Region resulting from the availability of employment in the growing industrial centres around Stoke and the Black Country.

Combination barns, with cattle occupying all or part of the ground floor, are found in the western hills and the northern dairying areas. Examples, initially of a high status, date from the later 16th century in the dairying areas of the Shropshire and Staffordshire plain.

There are some very early free-standing timber-framed granaries and stables, dating from the 17th century, in the west of the Region.

Hop kilns are a highly characteristic feature of the landscape of the Teme Valley, lowlands and plateau in Herefordshire, south Shropshire and west Worcestershire. This is the second major concentration of such structures outside the South East (where they are known as oast houses).

Growing of apples for cider was important in Herefordshire and parts of Worcestershire from the medieval period, becoming large-scale from the mid-17th century, and cider houses are a feature of many farms.

The Region has some very early and important examples of accommodation for cattle. In the Welsh borders area a number of former longhouses survive, some now serving only an agricultural function. The longhouse tradition appears to have continued into the 18th century in this area. In some cases cattle housing formed part of other buildings, particularly multi-functional combination barns which are concentrated in the Peaks area and in the west of the Region from the Shropshire and Staffordshire Plain to south Herefordshire. Single-storey lofted cow houses, dating from the 17th century, are also found. These buildings are equivalent in date to the combination barns of the Pennines area and of the wood-pasture landscapes in the South East and East of England. The great majority of cattle housing is of 19th-century date, and on the Staffordshire and Shropshire Plain includes large-scale examples similar to that found across the border in Cheshire.

Pigsties are most strongly associated with the dairying areas of Shropshire and Staffordshire and in the cider-producing area south of the Region..

In the former open-field areas of Warwickshire and Herefordshire isolated threshing barns dating from the 17th and 18th centuries are found outside the nucleated cores of settlements. Outfarms in areas of parliamentary enclosure and on large estate-managed farms are typically of mid-19th-century date, so these examples are amongst the earliest surviving in the country. Field barns are found in the pastoral areas of the Peak District, where small stone buildings providing haylofts above and livestock accommodation below are to be found in the corners of many fields. Most date from the late 18th and 19th centuries.

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:

jeremy.lake@english-heritage.org.uk

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 West Midlands 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 West Midlands 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 West Midlands 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

2.2 THE CHARACTER OF THE WEST MIDLANDS REGION: AN INTRODUCTION

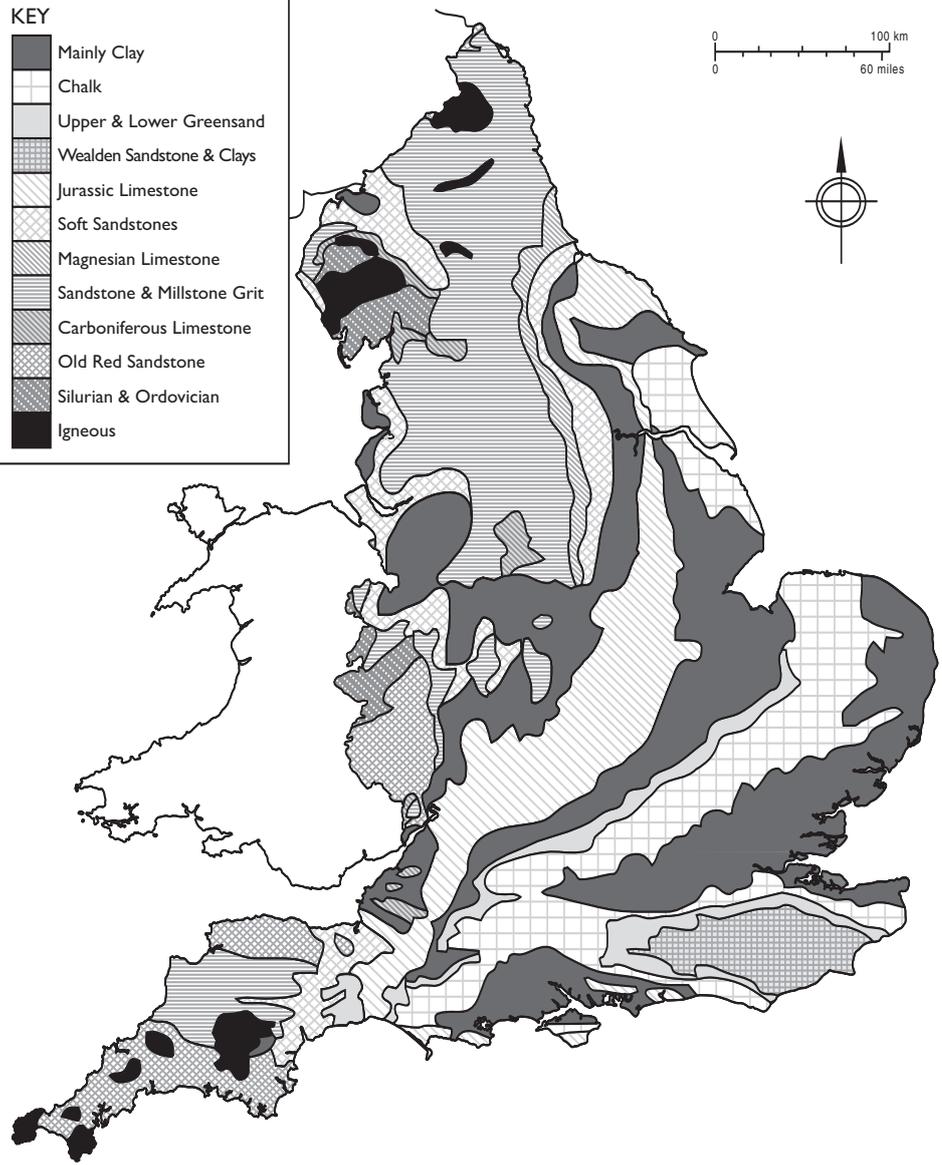
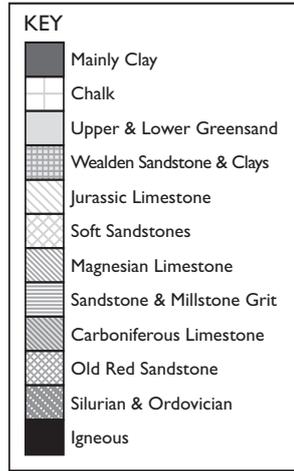
The West Midlands Region comprises the counties of Shropshire, Staffordshire, Herefordshire, Worcestershire and Warwickshire and the Unitary Authority areas of Stoke on Trent, Wrekin, Dudley and the West Midlands Metropolitan County. The Region covers much of what has been described as 'the Midlands Triangle' – a large central plain that is undulating rather than flat – and is surrounded by areas of upland. To the west are the Shropshire and Herefordshire hills and Welsh borderlands, to the north are the moorlands of the Pennines, and to the south-east the limestone scarp of the Cotswolds.

Geologically the oldest, hardest rocks occur as isolated outliers in the South Shropshire and Malvern Hills, whilst Herefordshire is dominated by the Red Devonian Sandstones and Marls that produce the characteristic red Herefordshire soils. To the north, into Shropshire, limestones and shales give rise to ridge and valley scenery. Warwickshire, central Staffordshire and Worcestershire are dominated by clays whilst the carboniferous rocks of the centre of the Region provided the coal and iron on which the Region's previous prosperity was based (MAFF 2000, pp.5–9).

The Region contains a rich variety of landscapes, from the lowland fruit-growing areas of the Vale of Evesham along the Avon valley and the fertile arable lands of

IA The geology of England
 England displays a huge diversity in geology, with a greater variety in small areas than anywhere else in Europe. The West Midlands Region has a very varied geology offering a wide range of building materials. The different stones available for walling and roofing make a major contribution to local distinctiveness in parts of the Region.

*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*



central Herefordshire, to the barren uplands of the north-east Staffordshire Moorlands and the Shropshire hills and the urban and industrial areas of the Black Country and the West Midlands.

Along the western fringe of the area are a number of upland character areas, including the Oswestry Uplands, the Clun and North-West Herefordshire Hills and the Black Mountains, which mark the transition between England and Wales and upland and lowland landscapes. Welsh place-names, scattered farmsteads and small, irregular fields on the lower slopes with large regular enclosures of 18th- and 19th-century date on the higher ground are typical features of this border country where poor-quality Grade 4 land and a cold, wet climate are significant limiting factors to agriculture.

To the east of the border areas the landscape is broadly one of rolling, gentle undulations divided by hills and plateaux, much of which is Grade 2 land. In the north of the Region the Shropshire, Cheshire and Staffordshire Plain is an extensive, predominantly dairying area with

increasing arable to the south-east interrupted by red sandstone ridges and marked by mosses and meres. Cannock Chase and Cank Wood represent an area with strong contrasts between densely populated urban areas and the heavily wooded heathland of Cannock Chase itself. The north-eastern corner of the Region extends into the South West Peak character area which covers the southern part of the Pennines, where the upland landscape of moorland, isolated farmsteads and dry-stone walls of millstone grit are characteristic of the higher areas. Here poor-quality Grade 4 and 5 land predominates, and stock rearing and, in the foothills, dairying form the main elements of the agriculture of the area.

Some of the best quality agricultural land is to be found across Herefordshire and Worcestershire in the Herefordshire Plateau and Teme Valley, the Herefordshire Lowlands, South Herefordshire and Over Severn, and in the Severn and Avon Vales character areas. The majority of the Grade 1 and 2 land in the Region is concentrated in these areas, where intensive

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.

Based upon Joint Character Areas. Source: Defra/English Nature/Countryside Agency.
©/Crown copyright OS Licence no. 100042054

JCA number	JCA name
52	White Peak
53	South West Peak
61	Shropshire, Cheshire and Staffordshire Plain
63	Oswestry Uplands
64	Potteries and Churnet Valley
65	Shropshire Hills
66	Mid Severn Sandstone Plateau
67	Cannock Chase and Cank Wood
68	Needwood and South Derbyshire Claylands
69	Trent Valley Washlands
70	Melbourne Parklands
71	Leicestershire and South Derbyshire Coalfield
72	Mease/Sence Lowlands
73	Charnwood
94	Leicestershire Vales
95	Northamptonshire Uplands
96	Dunsmore and Feldon
97	Arden
98	Clun and North West Herefordshire Hills
99	Black Mountains and Golden Valley
100	Herefordshire Lowlands
101	Herefordshire Plateau
103	Malvern Hills
104	South Herefordshire and Over Severn
105	Forest of Dean and Lower Wye
106	Severn and Avon Vales
107	Cotswolds



arable production is typical, although rich meadowland is found along some of the valleys. Across Herefordshire, and extending into the adjacent parts of Shropshire and Worcestershire, orchards and hop fields are characteristic. The Vale of Evesham and the upper Avon and Leadon valleys are important horticultural areas. The southernmost part of the Region includes the edge of the Cotswolds with its characteristic steep wooded slopes and open expanses of dry-stone-wall

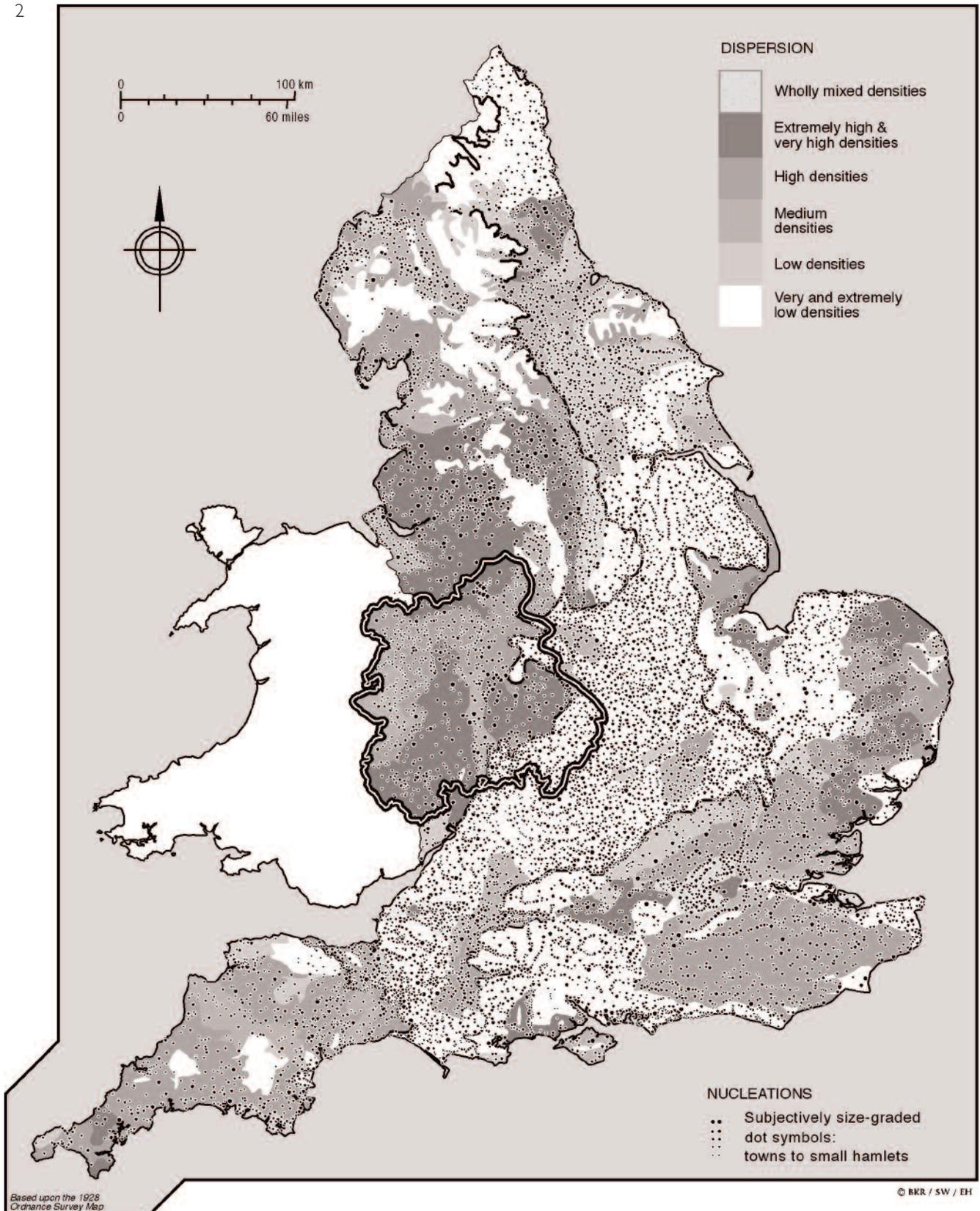
enclosed fields and limestone-built houses and farmsteads.

Across eastern Worcestershire and Gloucestershire, where the climate is warmer and drier than the upland parts of the Region, the majority of the land is Grade 3, of good to moderate quality, and is used for cereals and grassland. Where there are lighter soils a more varied range of crops is grown.

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. The majority of the area of the West Midlands Region lies in the Northern and Western Province with high levels of dispersed settlement. Only small areas of east Staffordshire and south-east Warwickshire extend into the village-dominated 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



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.

2.4.2 RURAL SETTLEMENT IN THE WEST MIDLANDS

The eastern fringe of the Region, running from the area to the east of the Severn (in the Severn and Avon Vale character area) and into the valleys of the Trent and other rivers to the north-east of Birmingham, lies within the Central Province. Here nucleated settlement predominates, the formerly extensive common arable fields having been subject to piecemeal enclosure at varying rates from the 14th century.

Most of the Region, however, lies within Roberts and Wrathmell's Northern and Western Province where dispersed settlement and small nucleations prevail (Roberts 1987, p.171; Roberts & Wrathmell 2000). Within this general pattern of settlement there are areas that have a greater density of dispersed settlement.

Across Herefordshire and Worcestershire there are numerous small hamlets and farmsteads set in an anciently enclosed landscape, possibly 'the least damaged set of old landscapes in the country' (Roberts & Wrathmell 2000, p.56). Very high densities of dispersed settlement are also found in the Shropshire and Staffordshire Plain and north-west Warwickshire, particularly in the Forest of Arden where many moated sites and 'green' place-names testify to colonisation from earlier settlement cores in the period 1000 to 1300. The patterns of enclosure are extremely complex, and range from small-scale and irregular fields enclosed from woodland before the 14th century, enclosures relating to

isolated farmsteads and hamlets within which were communally farmed strips, to – especially around larger nucleated settlements in the river valleys – open fields which remained unenclosed until the 19th century (Roberts and Wrathmell 2002, pp. 129-131, 164-9).

One of the areas of highest dispersion in the 19th century was the Black Country, where a largely rural area characterised by largely dispersed settlements in the 18th century developed into an intensively settled landscape with chains of small hamlets associated with industrial activities such as mining, furnaces and transport (Roberts & Wrathmell 2000, pp.55–6).

3.0 Building Materials

3.1 NATIONAL OVERVIEW

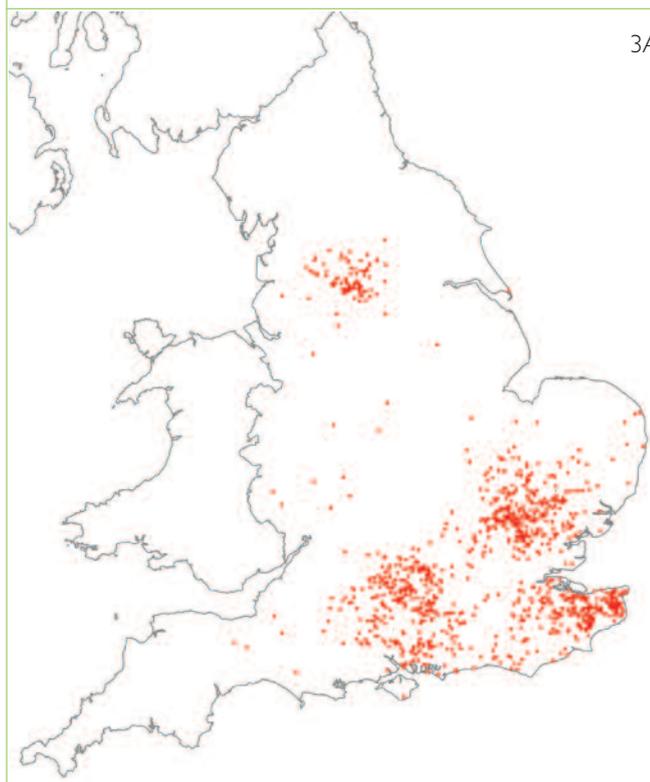
Farm buildings were frequently altered and re-roofed, and survivals can display evidence for successive phases of rebuilding, marked by straight joints in masonry or indications of mortise holes and joints in timberwork.

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

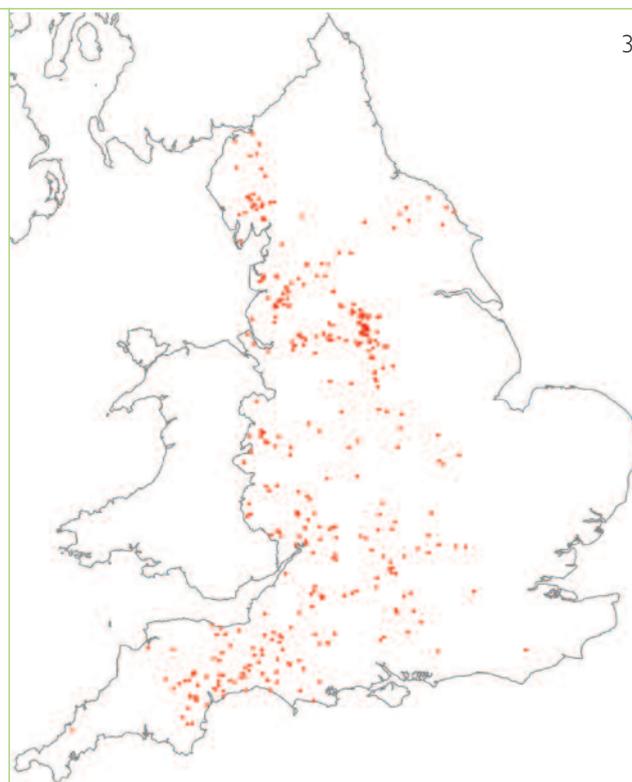
easier transportation of building materials into inland areas. Buildings in stone and brick, and roofed with tile or slate, increasingly replaced buildings in clay, timber and thatch from the later 18th century. Mass-walled buildings comprise the majority of listed agricultural buildings (67%), with 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 *Vaistell's Designs for Agricultural Buildings* (1827) and *Stephens's Book of the Farm* (1844) helped to promote more standardised forms of

3 The distribution of 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, stretching into the south of the East of England Region, with 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. Cruck construction is entirely absent from the East of England Region.
© Crown copyright. All rights reserved. English Heritage 100019088. 2005



3A



3B

4 A Aisled barn, Cressing Temple, Essex. One of the earliest surviving barns in England on an estate of the Knights Hospitaller erected with timber felled between 1259 and 1280. (South Suffolk and North Essex Claylands) © *English Heritage / Michael Williams*

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) © *Jen Deadman*

5 Listed earth-walled agricultural buildings in England. This map shows the concentration of earth-walled agricultural buildings in the South West Region, with small areas across the Midlands (including a number in Warwickshire) and the North where earth-walled buildings survive. Earth was once more widely used but in areas such as the East Midlands most of these buildings were swept away in the 19th century. Additionally, smaller earth-walled buildings are less likely to be listed; this map serves to demonstrate the main areas of earth-walling and not absolute numbers.

© Crown copyright. All rights reserved. *English Heritage 100019088. 2005*



construction. Metal roofs were used from the 1850s for covered yards and other buildings on expensive planned 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.

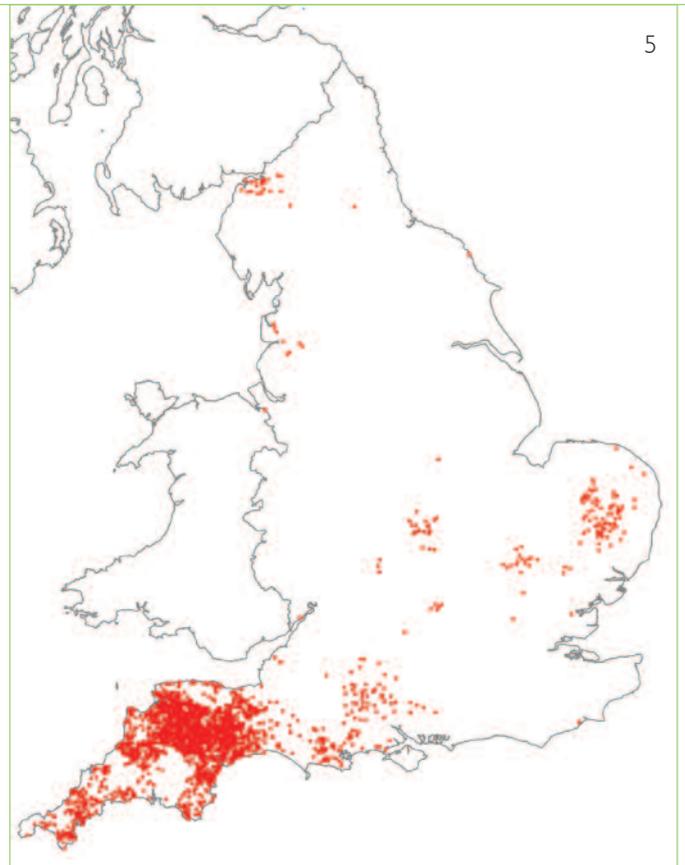
3.1.1 WALLING

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



5

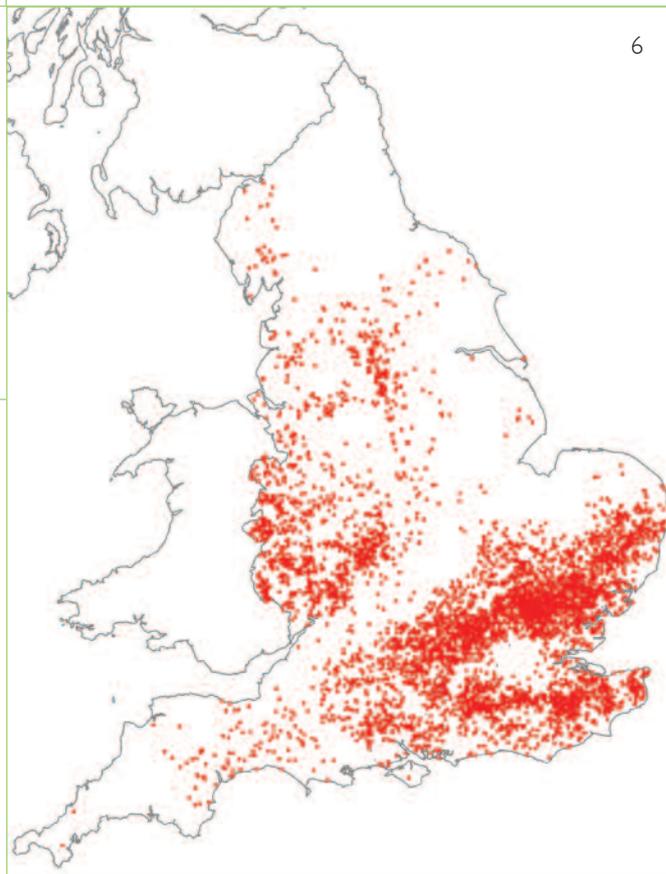
on some farms, for example for silage clamps, but did not achieve general use until after the 1950s.

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

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. © Crown copyright. All rights reserved. English Heritage 100019088. 2005

6



availability of timber and, together with cultural factors, have influenced the distribution, appearance of distinct traditions in timber framing and the framing of roof 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).

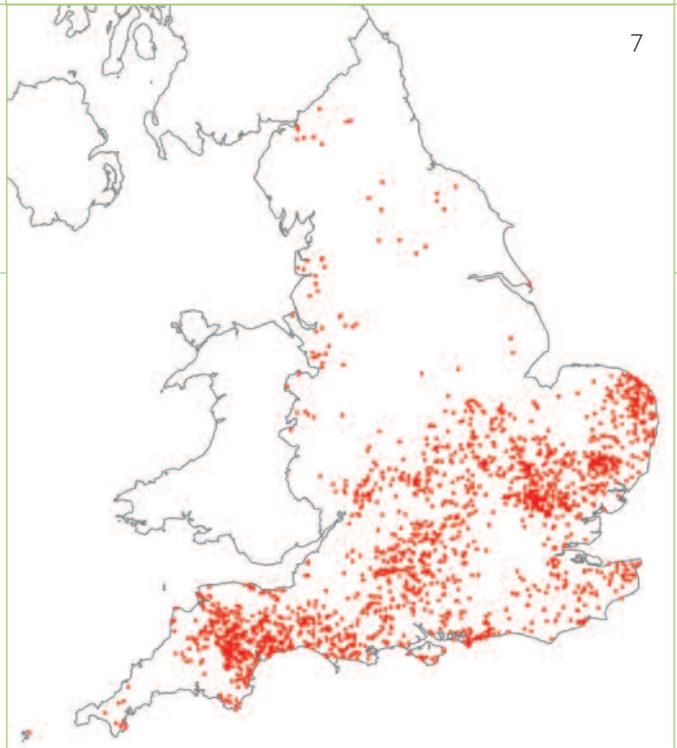
3.1.2.2 Plain clay tiles and stone slates

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

7 Listed thatched agricultural buildings in England. Particularly evident is the concentration of surviving thatch – the majority of which in agricultural buildings is listed – in southern England, despite its widespread replacement by materials such as corrugated iron from the late 19th century. Rebuilding, and reproofing in slate and tile, has removed the evidence for its formerly extensive use (in straw, heather and bracken) from much of northern England. Such a map presents an obvious invitation to future analysis and research.
© Crown copyright. All rights reserved. English Heritage 100019088. 2005



7

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. 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 WEST MIDLANDS

3.2.1 WALLING (Figure 8)

3.2.1.1 Stone

Across parts of the Region there is a great availability and diversity of stone for building, from the red sandstones of the Shropshire and Staffordshire Plain and the millstone grit of the South West Peak, to the limestones and siltstones found across central Shropshire and into Herefordshire. Although not of sufficient quality for ashlar work, these limestones were widely used for vernacular buildings (Scard 1990, p.75). Across much of Herefordshire the red, pink and grey sandstones were regularly used for building purposes.

In the south-east corner of Warwickshire and southern Worcestershire, close to the limestone outcrops of the Northamptonshire Uplands and the Cotswolds, the landscape character is heavily influenced by the available building stone. As the clay vales spread out below the limestone ridge of Edgehill, both the creamier limestones and red ironstone dominate, whilst the Cotswold limestone gives a highly distinctive appearance to settlements and buildings in southern Worcestershire.

3.2.1.2 Earth

Earth-walled buildings, locally known as mud, are found in eastern Warwickshire (survival being concentrated in the Dunsmore and Feldon area) using the yellow-brown Liassic subsoil. Farm buildings with mud walls were usually left unrendered (McCann 2004, pp.31–2).

3.2.1.3 Timber

This Region, and the adjacent border area of Wales, is especially rich in timber framing, particularly in Herefordshire and Shropshire. Square panel framing, a distinctive regional tradition extending from southern Lancashire to north Gloucestershire, was commonly

adopted where walls were left exposed. Originally a wattle frame of hazel (unfinished for ventilation or daubed with clay) were used to infill. There are instances in the north and west of the Region of panels infilled by horizontally set boards (Barson & Bond 1999, p.20) a feature concentrated almost wholly in this part of the country.

From the 18th century onwards bricks were often used as a replacement infilling. Weatherboarding is a common form of cladding for timber-framed buildings, and in the western part of the Region is often associated with tall, stone plinths and gable walls. A similar combination of weatherboarded framing (often in softwood) and brick walls is associated with barns of late 18th- to early 19th-century date. By the 18th century, timber framing had been reduced to a very minor role over much of Staffordshire (Peters 1969, pp.2–3), although timber-framed buildings continued to be erected in Herefordshire into the 19th century.

The distribution of crucks is particularly dense in the West Midlands Region, and examples in houses have been dated through dendrochronology from the late 13th to the 17th centuries. They are frequently found in farm buildings, and examples extend from very small-scale barns to the 14th-century Leigh Court near Worcester, the largest full cruck frame in the country. Cruck building was general throughout the Region until the 16th century, until its gradual replacement by post-and-truss buildings.

3.2.1.4 Brick

By the 17th century brick was replacing timber framing throughout the Region. Farm buildings, unless they were of a particularly high status, were not generally affected



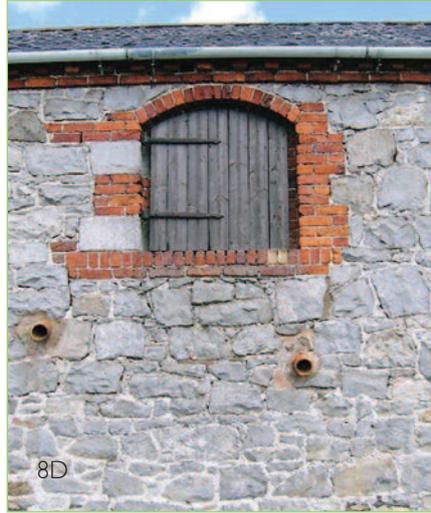
8A



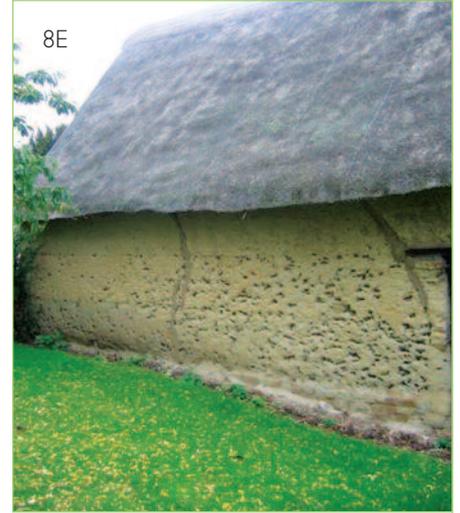
8B



8C



8D



8E



8F



8G



8H

8 Examples of walling materials in the West Midlands Region
 A–D Stone. Sandstone as used across the Region displays a wide range of colours and texture. (A Herefordshire Lowlands; B Herefordshire Plateau; C & D Shropshire, Cheshire and Staffordshire Plain)
 E Earth. Earth was not widely used across the Region but in the south-east (particularly the Dunsmore and Feldon area) earth-walled agricultural buildings survive. As with many agricultural buildings and boundary walls, the earth has been left unrendered.
 F & G Timber frame. Timber framing is characteristic of much of the Region. The panels of framing could be infilled with brick (F Herefordshire Lowlands) or wattle and daub. In some barns wattle that provided ventilation filled the upper panels whilst weatherboarding covered the lower part of the frame (G Black Mountains and Golden Valley).
 H Brick. Locally made bricks can give a distinctive character to farm buildings as can the use of details such as the use of ventilation slits and dentilled eaves. (Teme Valley)
 A, B, F and G © Bob Edwards; C, D and E © Jeremy Lake;
 H © Peter Gaskell

9 Examples of roofing materials in the West Midlands Region

- A Thatch. Thatch is not a highly characteristic feature of the farm buildings of the West Midlands but some examples of straw thatch survive. Water reed was not widely used in the Region. (Dunsmore and Feldon)
- B & C Stone capable of being slit into thin sheets for making roofing slates is found in Herefordshire (sandstone, B Black Mountains and Golden Valley) and in the Cotswolds (limestone, C Cotswolds) each having its own character, both in terms of the colour of stone and the size of the slates produced.
- D Clay tiles. Clay for brick and tile making was available in many parts of the Region, offering an alternative to thatch, and is predominant in the

- north of the Region. (Shropshire, Cheshire and Staffordshire Plain)
 - E Corrugated iron. As elsewhere in the country, corrugated iron as a replacement or (as here) applied over thatch has prolonged the life of many farm buildings. (Shropshire Hills)
 - F Welsh slate. Although the proximity of the north-west part of the Region to Wales meant easier and earlier access to Welsh slate, across most of the Region the use of Welsh slate increased as the railways made transportation easier and cheaper. Slate allowed a lower roof pitch to be used, characterising many farm buildings of the period from earlier thatched or tiled buildings. (Herefordshire Lowlands)
- A, C, D & E © Jeremy Lake; B & F © Bob Edwards



9A



9B



9C



9D



9E



9F

until the later 18th century onwards. In those parts of the Region where there was extensive rebuilding of farmsteads in the 18th and 19th centuries and clay was readily available, brick is the typical building material.

3.2.2 ROOFING (Figure 9)

3.2.2.1 Thatch

Straw thatch was undoubtedly one of the earliest roofing materials used over most of the Region, even in areas with a historical predominance of pastoral farming. Further declines in the extent of arable and the availability of alternative roofing materials led to a rapid decline in the use of thatch, particularly in the late 19th and early 20th centuries (Moir & Letts 1999, p.15).

3.2.2.2 Slate

There was some limited availability of stone for slates in Herefordshire, Shropshire and along the Oxfordshire

and Northamptonshire border. Along the Welsh border, slate from Wales was imported into the Region and stone slates were being brought into Staffordshire from Westmorland by the early 19th century (Moir & Letts 1999, p.17). Oak shingles were used in west Staffordshire (Peters 1969, p.5). Improved transportation from the later 18th century, firstly through the development of canals and then the railways, meant that Welsh slates could be more widely distributed and they replaced locally produced roofing materials in many areas.

3.2.2.3 Tiles

By the 18th century, clay tiles were widely used, particularly in the predominant brick areas of north Shropshire and Staffordshire, two of the leading tile-manufacturing counties in England (Peters 1969, p.5). They are now common, and away from upland areas the predominant form of roofing.