

## National Farm Building Types



On 1st April 2015 the Historic Buildings and Monuments Commission for England changed its common name from English Heritage to Historic England. We are now re-branding all our documents.

Although this document refers to English Heritage, it is still the Commission's current advice and guidance and will in due course be re-branded as Historic England.

<u>Please see our website</u> for up to date contact information, and further advice.

We welcome feedback to help improve this document, which will be periodically revised. Please email comments to <u>guidance@HistoricEngland.org.uk</u>

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# National Farm Building Types



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### **BUILDING TYPES – A DETAILED GUIDE**

This document summarises the character and significance of the principal types of farm building in England, adding detail to the NATIONAL FARMSTEADS CHARACTER STATEMENT. Both documents use a consistent terminology for describing farmsteads and their building types, now incorporated into a new thesaurus which will allow users to identify and apply standardised indexing to farmstead types and their functional parts. This will be of use to Historic Environment Records and it is hoped to anyone involved in the recording of farmsteads. It is intended to be a dynamic indexing tool which will evolve with further use; suggested additions and/or amendments can be made by using the on-line form at http://fishforum.weebly.com/submit-a-candidate-term.html.



The maps in this document show the distributions of listed buildings for some building types, and show the National Character Areas which are introduced and tabulated at the end of the NATIONAL FARMSTEADS CHARACTER STATEMENT.

Farm buildings were required for the following range of functions, some of which were often combined into a single range rather than specialist individual buildings.

#### Storing and processing crops

- A **barn** for storing and processing the harvested corn crop over the winter months was the basic requirement of farms, and corn could also be stacked in yards adjacent to the barn.
- Grain was stored in a **granary**, which could be detached, sited over another farm building, incorporated in the barn or in the farmhouse.
- In some parts of the country, **hop kilns** or **oasts**, **cider houses** and **fruit stores**.

#### Transport

• Cartsheds typically face routes and tracks. Forges are rare.

#### Housing and managing farm animals

Farm animals were highly valued for their manure, provided motive power and produce for export from the farm on the hoof or as finished goods. They required one or more yards to aid free movement and the management of stock.

- Straw was taken from the barn to **cattle housing**, yards and **stables** to be used as bedding. The resulting manure was then forked into carts and returned to fertilise the surrounding farmland.
- **Pigsties** were built on most farms, and particularly on dairying establishments where there would have been whey a waste product from cheese making to feed them on.

find yards around upland and downland farmsteads.

• Farm birds required **hen houses**, **goose houses**, **doveholes** and more rarely **dovecotes**.

Storage was also required in hay lofts or **hay barns** for hay from surrounding fields and meadows. Hedgerows, woodland and rough ground was also an important source – especially upland and wood pasture areas – of holly and ash, bracken and also gorse from roadside verges and common land. Root crops, primarily turnips, and then imported feed such as oilcake became increasingly widespread from the late 18th century and required their own **root houses** and **mixing houses** which were incorporated into farmstead plans.

#### Brewing, baking and dairy products

Purpose-built **dairies** are very rare as they were commonly sited within the farmhouse along with **cheese rooms** in some areas. **Bakehouses** and **brewhouses** were commonly detached. **Malthouses** and **kilns** for drying corn are very rare.

A range of other buildings can also been found in a farmstead, including **boiling houses** for animal feed; **forges** or dog kennels incorporated beneath granary steps.

• Sheep rarely required buildings, it being more usual to

#### NATIONAL FARM BUILDING TYPES

#### ASH HOUSE

Ash houses stored ash from the hearth fire, used as a fertiliser. They are concentrated in an area from the eastern edge of Dartmoor to west Somerset.

#### Typical features

• Small square or circular plan building with a small opeing and often a stone corbelled roof.

#### Significance

• There are few surviving examples, and similar examples are also found in the Channel Islands and north west France.



An example from the east of Dartmoor with a corbelled stone roof found associated with these buildings and also dovecotes and pigsties in south west Wales and north west France. Photo © Philip White

#### BARN

An introduction is followed by sub-sections which further detail how barns processed crops, the character and significance of the different types of barn.

The principal purpose of the barn was to store and process the harvested corn crop, and after threshing store straw before it was distributed to yards and buildings for farm animals. This function could also be combined with others, such as storing grain, carts and farm equipment and housing livestock and their fodder. In many areas the barn was the principal or only building on the farmstead until the 19th century.

#### Typical features of all barns

The most commonly encountered features are:

- Internal subdivision into 'bays', marked by roof trusses, wall posts or major partitions. The number of these bays could reflect the size of the farm and its corn crop, and they could also mark internal subdivision into stalls for animals and lofts for storing grain or hay.
- Opposing doors to a 'threshing bay' where the harvested crop was beaten out on the threshing floor and then the grain was separated from the lighter chaff in the cross-draught (a process known as winnowing).
- Other openings for forking the crop into storage bays, or hay for animals, and doorways into animal housing or spaces which could be used for a variety of purposes (such as shearing sheep).
- Some barns retain chaff houses small rooms accessed from the threshing bay for storing husks from the grain crop (chaff), after it has been threshed and winnowed in the barn, for use as animal feed.
- Barns were commonly extended with lean-tos (also called outshots) for cattle. From the late 19th century, many barns were converted into **cow houses** and fodder processing and storage buildings. Barns may retain evidence for this change of function in the retention of stalling etc.

#### Significance

- Barns are usually the oldest and largest buildings on the farmstead, but those that survive are only a small proportion of those that are documented. Those of early 16th century and earlier date are of exceptional rarity and importance, even rarer being those that survive in the context of medieval houses and other buildings.
- The size of barns, and structural evidence for historical development and internal subdivision, can reveal differences in the size and wealth of farms and how buildings have changed in response to national and local trends in agriculture. This can for example be indicated by the construction of an additional barn, the enlargement and adaptation of earlier barns to house more harvested corn and evidence for internal partitions for animal housing and other functions.
- Ritual and tally marks can be found scratched into walls and timbers around the threshing floor.
- Evidence for mechanisation which was introduced in the 1790s and taken up in some areas, most obviously in the form of rare surviving **horse engine houses** and additions with chimney stacks for stationary steam engines. Evidence for water power, in the form of leats to carry water to the barn and for water-powered machinery, is exceptionally rare. Evidence for wind power is rarer still.



The rear of a small barn in Dartmoor, showing a winnowing door to the threshing bay. Opposing doors in pastoral or hill farming areas might in contrast be very small, and in some cases there might just be an opposing opening (sometimes called a winnowing door) to enable a cross-draught.

The smallest barns – of three bays as here – are concentrated in upland and upland fringe areas, on small farms that remained within villages and in small-scale farms that remained in wood-pasture areas and around areas of common grazing. Photo © Jeremy Lake



The largest barns – more than five bays and with two or even three on the same site – were built in the chalk downs, limestone wolds and arable vales of England. This is an aisled barn (see following page) with porches to two threshing bays in the North Kent Plain, where large farms developed on its rich loam soils. Threshing doors as here might be large enough to allow a laden waggon to enter and unload, and then leave through the opposing doorway. Photo © Bob Edwards

#### NATIONAL FARM BUILDING TYPES



Threshing the corn crop by hand continued to be the predominant way of processing the crop into the 19th century, especially in southern England and East Anglia. The sheaves of corn were beaten with a flail to separate the grain from the straw, the latter being stored in the bays either side of the threshing floor. The grain and chaff (the husks) were then winnowed to separate them by throwing the grain into the air, the through-draft from the opposing doors blowing the chaff away from the grain. Across the opening was a low board which fitted into slots on the door posts to prevent animals getting into the barn and retain the grain on the threshing floor. The introduction of the portable threshing gear and steam engines in the 1850s lowered the cost of machine threshing and enabled its more widespread introduction. © English Heritage

#### **BARN TYPES**

Whilst all barns contain a threshing floor and storage bays, there are significant distinctions between:

- Threshing barns which contain one or more threshing floors and bays for storing the sheaves of unthreshed corn and often the straw after threshing.
- Combination barns which were built to also house other functions, notably storing grain and carts or housing animals and their fodder.



#### COMBINATION BARNS



Some of the largest aisled barns in the arable vales and downs of southern England were built with integral stables and granaries, as here in this Hampshire Downs example, where the granary is raised on staddle stones. Photo © Bob Edwards



In striking contrast is this early 19th century barn in Cheshire, where small amounts of corn could be winnowed in the space between the opposing doors, also used for preparing feed, and most of the space was given over to cattle housing. © English Heritage

Combination barns in the wood pasture areas of the midlands, East Anglia and southern England date from the medieval period, and housed animals (usually oxen and milk cows) as well as their fodder and the corn crop. After this date, barns were converted into corn storage and processing buildings, and livestock moved out into detached yards and buildings.



18th century combination barn with integral stable and cart shed in Sollers Hope, Herefordshire. Photo © Sam Hale



17th century combination barn with integral stable and attached 19th century shelter shed for cattle in the High Weald. Photo O Bob Edwards

Most combination barns in the uplands and upland fringe areas of England (including **bank barns** and **field barns**) date from the late 18th century and replaced smaller-capacity barns, bringing the key functions of these farmsteads under a single roof. The earliest – dating from the late 16th to mid-18th centuries – are found on high-status farms including the home farms of gentry estates. For more details see **bank barns**.



Cruck-framed barns are widely documented across the upland and upland fringe areas of northern England. They often had one end partitioned off for a cowhouse. The external walls on this example at Drebley in Wharfedale, Yorkshire Dales, are 18th century or possibly earlier, and replaced the original timber and wattle walls. Fragments of heather thatch survive inside. To the east downslope end of the barn is an external door to the former cowhouse, the cattle being tethered with their heads facing the stone-flagged threshing floor. To the west end of the barn is a root cellar, which is later 18th century or later in date. There are several root cellars with segmental-arched roofs in this area, which relate to the expansion in the cultivation of root crops and in particular potatoes. Photo © Jeremy Lake



Storeyed barn from Weardale, Durham, showing a winnowing and loading door above a cow house and stables. This type of storeyed combination barn was built in large numbers in the late 18th and 19th centuries, often replacing earlier generations of cruck-framed barns, and is widely found in the Pennines and the south west (especially in an area from around Exmoor to Cornwall). Photo © Jeremy Lake

#### EVIDENCE FOR MECHANISATION

The take-up of mechanised methods of threshing the corn crop – by horse engines from the 1790s, water power, wind power and from the 1820s steam – was regionally very varied. Belt drives and shafting conveyed power to rooms for mixing animal feed elsewhere in the barn. Mechanisation was usually associated with the subdivision of the barn into smaller spaces for housing the threshing machine, the straw, grain and also preparing feed for cattle.



A waterwheel and a leat connected to a mill pond provides the most obvious evidence for water power within and around barns. Bank barns, as here in east Cornwall, were ideally suited to water power. © English Heritage



A large combination barn on the Duke of Bedford estate in Bedfordshire, typical of those on the largest courtyard plan farmsteads. It includes a granary sited above a large cartshed in the foreground and a projecting engine house, in which a portable engine would be parked and connected to internal gearing and machinery. Photo © English Heritage/ Mike Williams



A chimneystack marks the position of a fixed steam engine in this planned farmstead in the Cheviot Fringe, Northumberland. To the left is a granary, marked by external steps, above a stable, and to the right is a projecting straw barn. Machine threshing produced large amounts of straw. Photo © |en Deadman



In this Northumberland farmstead a horse engine powers a threshing machine on the first floor, on which the grain was bagged and from which straw was ejected into a lower straw barn on the left before it was taken to the cattle yard. © English Heritage



Ultimately, the barn could be reduced to a space for the receipt of corn threshed by portable machine in the yard, and for processing animal feed. Mixing barns such as these are concentrated in the East Midlands, and connected to cattle yards and housing. © English Heritage



Flywheels and drive shafts for transferring the power from portable engines often provide the only indication of their use. Photo Bob Edwards

#### NATIONAL FARM BUILDING TYPES

#### BANK BARN

A **combination barn** of usually two storeys. Through constructing the barn against a bank, both floors can be entered from ground level.

Typically bank barns have a threshing floor and storage bays, sometimes with a **granary** and hayloft, sited above **cattle housing**, **stables** and other functions such as **cart sheds**.

Bank barns could be placed along or across the slope. The former are known as **variant bank barns**. Many examples are of pre-1750 date. Buildings of this form are found throughout the upland landscapes of northern Europe, and allow livestock to be accommodated on part of the ground floor. The gable was always built into the bank, with the barn projecting into the valley. They are concentrated in the Lake District, especially to the east, and occur elsewhere in upland areas from the Dark Peak northwards.

The earliest examples of the classic form of **true bank barn** built across the slope may be late medieval, the documentary and building evidence indicating that largescale examples were built on gentry estates from the late 16th century and became widespread after 1750. They are concentrated in the northern uplands, especially the Lake District, and parts of Somerset, Devon and Cornwall in the south-west peninsula.



The map shows the concentration of bank barns in Cumbria and south west, in relationship to land over 180 and 300 metres high. Bank barns built with their gables set into the slope are more commonly found in Cumbria, and also along the Welsh Borders (Area 3) and across large parts of the uplands and upland fringe areas of northern England (Area 4). They also sporadically occur in the Cotswolds and other hilly areas. Found in all of these areas, but especially in the south west, are storeyed barns with crop storage and threshing floor often accessed by steps on the side wall. © Crown Copyright and database right 2013. All rights reserved. Ordnance Survey Licence number 100024900.



An early 19th century bank barn from east Cornwall, showing the access from the rear to the threshing floor above housing for cattle. C English Heritage





Variant bank barn in the Lake District, with a stable and cowhouse set in the downslope end and a small window marking a first-floor granary. Photo © Jen Deadman

The 16th century bank barn at Sizergh Castle. Large bank barns have been documented on the home farms of estates within and to the south of the Lake District. Photo © National Trust

#### BASTLES

A defensible farmhouse found on both sides of the Anglo-Scottish border. It is usually of two storeys, the lower floor being used to house animals and the upper for domestic use. Bastles offered farmers a defensive retreat where the family and stock could be secure from cattle rustlers in an area that remained lawless into the 17th century. There is evidence that were also built by estates anxious to attract tenants into re-settled areas, after the Union of the Crowns in 1603 had brought greater security to the area. In contrast to the tower houses with enclosed yards which were built between the late 14th and 16th centuries as refuges for high-status families and the tenants and inhabitants of an area, bastles were often built in clusters or even villages. The bastle tradition also continued in the form of non-defensible bastles, where the domestic space was sited on the upper floor, in and around the North Pennines.

#### Typical features

- Bastles generally date from the 16th to the 17th centuries although some are earlier.
- They are defined by thick outer walls and small and infrequent windows, often defined by a chamfer and sometimes with stone mullions. Doors, again often chamfered and sometimes treated decoratively, were internally stengthened by wooden drawbars which slid into flanking recesses.
- The ground floor was provided with ventilation slits and a single entrance. The door was strengthened by a drawbar, for which slots in the masonry remain. Any internal staircase is also capable of defence.
- 'Quenching holes' over byre doorways testify to the use of water thrown from above in order to prevent the burning down of front doors – a common means of attack.
- The upper domestic floor was externally marked by few, small windows. It was usually stone-flagged, and placed above a vaulted ground-floor ceiling or (more rarely) substantial timber beams. Stone slate floors allowing the heat from cattle to penetrate the upper-floor living space.
- The upper domestic floor is accessible by door accessed by a retractable ladder. It was heated by a hearth with a smoke-hood, set against one gable end, and it may also be subdivided and provided with an additional sleeping loft. New fireplaces, and the raising of the upper floor to provide more accommodation, were typical 18th century and later alterations.
- Many bastles developed in a linear fashion through successive additions, within their walled enclosure or barmkin.
- The addition of external staircases and the widening

of windows became more common in the 18th century. Many bastles were abandoned as dwellings and converted into working farm buildings, usually after around 1750.

• The steep scars associated with heather thatch are found on many bastles, and testify to the later lifting of the roof to take slates and provide further living space.

- Bastles are concentrated in the north of Cumbria and Northumberland, and together with those in southern Scotland reflect the unsettled border history of the area.
- All surviving internal features are very significant. Intramural stairs, set between the inner and outer walls, are very rare.
- The yards and surrounding boundaries dry stone walls often representing the rebuilding or realignment of turf boundaries – can retain high archaeological potential for the development of bastles in their landscape context.
- The tradition of having the domestic accommodation over a storage room or housing for animals provides a unique instance in Britain which is superficially similar at least in their planning to examples of two-storey farmhouses with ground-floor animal housing in the Alps and around the Mediterranean.



The remains of the former bastle at Akeld, near Wooler on the eastern fringe of the Cheviots, is possibly of 16th century origin. It is large for a bastle, and possibly served as a communal 'stonghouse' at the head of the village street which by around 1800 had been swept away by the present farm hamlet. Of the original building only the ground floor remains, the rest rebuilt in the 18th century. It is not directly associated with a farmstead complex although the former Manor House stands close by. Oval shaped earthworks in the vicinity of the building are suggestive of an enclosure and/or foundations of early farm buildings. In the roof of the barrel vault to the ground floor is a small hole which would have allowed access to the upper floors by a ladder. In more recent times the ground floor has been used as a cattle shelter and the first floor a granary. Photos © Jen Deadman

**Non-defensible bastles** lack most or all of the defensive characteristics noted in bastles. Many are 18th and early 19th century in date. The external access is via a permanent stair from the outset. The ground floor is normally used as a byre in rural contexts, but in an urban setting (as found for example in Alston) it may be intended for one of a number of other non-domestic uses.



A small-scale early 19th century example in Weardale. Such buildings were commonly extended in linear fashion. English Heritage



A small-scale early 19th century example in Weardale. Such buildings were commonly extended in linear fashion, Photo Jen Deadman

#### NATIONAL FARM BUILDING TYPES

#### BEE BOLES

Recesses built into walls for sheltering and making accessible bee hives.

They are concentrated in areas where orchards were important, with high rainfall and access to heather and moorland for pollination – especially the south west and Worcestershire, Cumbria, the Pennines and in and around the North York Moors.



This is an unusually fine row of 17th century bee boles at Nutwith Cote near Masham in Nidderdale. Photo Jen Deadman

#### BREWHOUSE/ BAKEHOUSE

Detached buildings separate but close to the farmhouse for brewing beer and baking bread, often combined into a single building. See also detached kitchen.

#### Typical features

- A single-storey building, usually with a single entry, and windows to the side walls.
- They will always have a chimney stack.
- Internally an oven and usually a copper.



Examples appear to be concentrated in the west of England, extending into Wales. Most are 19th century, and earlier examples are very rare.

- Few examples survive as they have usually been subsumed by the farmhouse and converted for other use.
- Surviving bread ovens and copper vessels for brewing and washing are rare.







Brewhouse and its internal copper, and a bakehouse (left). Photos © Worcestershire County Council

#### CART SHED

A building used for housing and protecting carts, waggons and farm implements from the weather, often open-fronted.

The cart shed housed not only carts for transporting muck to fields, the harvest to the farmstead and grain to market, but also the implements needed (primarily for arable cultivation) on the farm. It could also accommodate the coach or pony trap.

#### Typical features

- Open-fronted and sometimes open at each end, positoned facing routeways and often close to the stables. One or two bays may be enclosed with doors for the storage of small implements.
- In many areas cart sheds are combined with first-floor granaries, accessed by external steps. These may have evidence for hatches for dropping sacks of grain from granaries into carts; hoists for hauling grain; steps to granaries with internal grain bins and louvred windows.
- Trap houses may also form part of the domestic service buildings near the farmhouse.

#### Significance

- The size of cart sheds reflects the size and function of the farm larger examples are found on large arable-based farms.
- Pre-19th-century examples are rare. The earliest surviving cart sheds date from the 17th century but the majority are late 18th or 19th century in date.
- The largest cart sheds are found on large cornproducing farms.



Single-bay cartsheds, as here in the Yorkshire Dales with steps to a first-floor granary, are typical of upland farms. Photo © Jeremy Lake



A four-bay cartshed with an additional implement shed, marked by lockable doors, on a large corn-producing farm in the Hampshire Downs. Photo © Bob Edwards



External steps mark the entrance to a granary sited above a 2-bay cartshed in the Oswestry Hills, attached to a stable. The whole range testifies to the intensification of arable farming in the mid 19th century in this upland area. Photo © Jeremy Lake



Coach houses can incorporate a stable, as here, and a first-floor loft for hay and/or for housing a stablehand. Photo © Worcestershire County Councils

#### COACH HOUSE

A building similar to a cart shed used for storing a coach or pony trap, but situated closer to the farmhouse.

#### Typical Features

• Has a large opening, usually with a door.

#### Significance

• Survival is quite common as the building easily lends itself to conversion to a garage.

#### CATTLE HOUSING

Evidence for cattle housing is rare before the 19th century and largely confined to the longhouses of north and west England, the bastle houses of northern England, the linhays of south-west England and some detached cow houses and housing in multi-functional barns. Most date from the 19th century and comprise calf houses, cow houses, loose boxes for fattening, open-fronted shelter sheds and hemmels, and covered yards from the 1850s. Local dialect terms are still in common use for cattle housing, such as byre in northern England and shippon in south west England. Any evidence for housing for draught oxen is hard to find, and extremely rare.

#### CALF HOUSE

A building, or part of a building, for housing calves.

#### **Typical** features

- Calf houses are similar to but typically smaller in scale, with lower eaves, than **cow houses** or **loose boxes**.
- They are often located close to the farmhouse.

#### Significance

• Calf houses are a distinctive feature of cattle-rearing areas, A range of calf houses in the Yorkshire Dales. © Jeremy Lake particularly upland and upland fringe areas.



#### **COVERED YARD**

A covered yard for the shelter of cattle and the conservation of their manure. They were first used on planned and model farmst of the 1850s to 1870s. They became increasingly common from the 1880s when former open yards were roofed over with timber or metal-framed superstructures.

#### Typical features

- · Covered yards needed adequate ventilation, and could be provided with complex systems of louvres and shutters.
- Covered yards built on the home farms of large estates can be of some architectural quality and incorporate cast iron stalls and feed and water bins.

#### Significance

- Covered yards that form part of coherent planned and model farm complexes of the 1850s to c 1880, and later examples with architectural quality are significant.
- Covered yards inserted into pre-existing open cattle yards from the late 19th century are much more common.



The interior of a covered yard within a planned farmstead at Apley Park in Shropshire, listed at grade II\*. The roof makes use of laminated timber. The park was purchased in 1867 by William Orme Foster, an ironmaster from Stourbridge. The building was built to the designs of local architect Robert Griffiths (1825 - 1888) and incorporated a great deal of technical innovation such as the use of steam power for threshing and processing feed. Photo © English Heritage/Mike Williams



Exterior of a covered yard in south Essex, Photo © English Heritage/Mike Williams

#### COW HOUSE

A building in which cattle are normally tethered in stalls, sometimes with a hay loft. They are most common along and to the west of the Pennines, where cattle needed to be housed for a very long time (May to October) over winter.

#### Typical features

- Externally, lower and wider doorways than stables and more limited light and ventilation in the form of ventilation slits.
- Windows and other features to assist ventilation were widely introduced from the mid-19th to early 20th centuries, e.g. hit-and-miss ventilators, and air ducts and ridge ventilators.
- Cow stalls comprise low partitions of wood, stone or slate. Feeding arrangements can survive in the form of hayracks, water bowls and mangers for feed. Cast iron was used from the late 19th century.

#### Significance

- Surviving examples of pre-19th-century cow houses including within **combination barns** (see page 5) are rare in a national context and are of high significance.
- Hygiene regulations from the early 20th century have resulted in new floors, windows and stall arrangements being inserted, replacing earlier traditional stalling and floors. The latter survive best in the north and west of England.



Cow house attached to a bastle near Bewcastle in Northumberland. Note the raised causeway to enable dry access, the ventilation slit to the left, and the part-glazed window to the right set in an opening widened in the midlate 19th century. Photo © Jen Deadman



Late 19th century single-storey cow house, with ridge ventilators and detached hay barn, in Nidderdale. Photo Jen Deadman



Large late 19th century cow house for dairy cattle in the Cheshire Plain, showing the stalling arrangements widely introduced in wide-span buildings from the mid 19th century. Two-storey cow houses with hay lofts – although rarely built to this scale - are most commonly found along and to the west of the Pennines, along the Welsh borders and in the south-west peninsula. © English Heritage

#### NATIONAL FARM BUILDING TYPES

#### 18TH CENTURY AND EARLIER COW HOUSES

This map, based on listed building records and showing the National Character Areas, provides an indication of the survival of 18th century and earlier cow houses. They are concentrated in the warm but wet south west (Area 1), and in the Pennines and wetter western half of England (Area 2) with an outlier in the upland area of the North York Moors (3). Housing for cattle can be found in longhouses and integrated into barns (from the 17th century in the West Pennines) but there are also single-storey and two-storey cowhouses of the 18th century and earlier. Single-storey cowhouses are also found in the claylands of East Anglia, reflecting the importance of dairying until the 18th century (Area 5, although there are many unrecorded cow houses further north into south Norfolk). Here, and in the stock-rearing area of the Weald (Area 6), barns can retain significant but often undetected evidence for cow housing and stables in the form of partitions and floors that were removed in the late 18th and 19th centuries. There is also a cluster of early survivals of single-storey cow houses in an area of central southern England (7). © Crown Copyright and database right 2013. All rights reserved. Ordnance Survey Licence number 100024900.





Single-storey timber-framed cow house in the Shropshire Hills, of a type found along both sides of the border with Wales. Photo Jeremy Lake



Two-storey timber-framed cow house in Herefordshire. Early cow houses of this type, with a first-floor hay loft, are found along and to the west of the Pennines, along the Welsh borders and in the south-west peninsula. Photo © Bob Edwards



Some single-storey cow houses, locally called neathouses, remain from the I 8th century and earlier in the claylands of Suffolk. Photo © Mike Williams/ English Heritage



This 18th century cow house near Witney in Oxfordshire is also a rare example of a building in use for draught oxen into the 19th century. Photo © Jeremy Lake

#### HEMMEL

A **hemmel** is a small roofed shelter for cattle without tethering points or stalls, but with a small yard attached. They are a distinctive feature of eastern arable districts, particularly in the north-east of England.



Photo © Jen Deadman

#### LINHAY

Two-storeyed building with open-fronted cattle shelter and hay loft. Historically the term linhay was used to refer to a wider range of buildings including field barns.

#### Typical features

- An open-fronted cattle shed and hay loft (often termed a tallet). The shorter and milder winters in south-west England enabled cattle to be housed in open-fronted buildings.
- The tallet may be constructed as a conventional floor or simply created from poles.
- Linhays can range in size from a single bay to L- and U-shaped ranges of over twenty bays, and are always associated with yards for cattle.
- The linhay can face into the principal farmyard or be set within its own yard.
- It is quite usual to find that part or all of the openfronted side, especially the upper part, was later boarded up: this was an alteration associated in some areas, such as north Devon, with the development of the dairying industry (and the need to shelter cattle indoors) in the later 19th century.

#### Significance

- The linhay comprises one of the earliest forms of cattle housing that can be found in England. Examples date from the 16th century, and many are pre-19th century in date.
- It is characteristic of Devon, eastern Cornwall, west Dorset and south Somerset, and there are some examples along the Welsh borders in Herefordshire. There are also similar forms of cattle housing in western France.



As well as a concentration in west Somerset, Devon and east Cornwall, linhays are found in smaller numbers in central and west Cornwall. There is a small number along the southern part of the Welsh Borders, which are not shown in this map of listed examples. © Crown Copyright and database right 2013. All rights reserved. Ordnance Survey Licence number 100024900.



Linhays can be found linked around cattle yards, as here in mid Devon. Photo © Jeremy Lake

#### LOOSE BOX

An individual cubicle for housing fatstock and sometimes bulls, found in the form of **lean-tos** attached to **barns** or other buildings, or as continuous ranges with an optional central or rear feeding passage.

#### Typical features

- Loose boxes were either built as individual boxes or more usually in a row with a central or rear feeding passage, distinguished externally by continuous rows of doors.
- Double rows would have a central feeding passage and were to be found on many farms by 1860.
- Often the floor of the boxes was sunken and the manure would build up in them during the winter. They reflected a realisation that warm and dry conditions would promote weight gain (through minimising heat loss) and retain the quality of the manure.
- The ceilings could be lined with thatch, to minimise condensation.

#### Significance

• Extensive ranges of loose boxes are a distinctive feature of farmsteads in areas where cattle were intensively fattened, usually in combination with the growing of roots and arable crops. They are all of 19th-century date, and mostly date from the 1840-1870 High Farming period.



Range of loose boxes marked by their individual doors in a large planned farmstead on the coastal plain in Northumberland. Photo © Mike Williams/ English Heritage



Bull pens, essentially no more than structurally enhanced loose boxes, have been an integral component of commercial beef and dairy farms since the late 18th century. Photo © Jeremy Lake

#### SHELTER SHED

An open-fronted structure for cattle facing onto cattle yards. Cattle yards with shelter sheds were typical of mixed farming areas where cattle were housed on the farmstead as fatstock and for their manure.

#### Typical features

- Single storey ranges. Shelter sheds can be detached buildings, attached to the gable end of a barn or built against the side of the barn.
- Common internal fittings were mangers and hayracks, and sometimes stalls.
- Doors in one or both of the gable ends near the back wall gave access to a feeding passage.

#### Significance

• Pre-19th-century examples will be rare



Ranges of shelter sheds are a typical features of regular courtyard farmsteads built to E and F-shaped plans, as here in south Nortfolk. Photo © Jeremy Lake



Shelter sheds, and other forms of cattle housing, can be found attached to earlier barns as here bordering the Hampshire Downs. Photo © Bob Edwards

#### CIDER INDUSTRY

#### CIDER HOUSE

A building associated with the milling and pressing of cider apples to produce cider (or pears for perry) and for storing the drink in barrels.

The growing of apples for cider (or pears for perry) was important in an area extending from the southern West Midlands to east Cornwall. It was also important in other areas, particularly Kent and Suffolk, where few cider houses have been identified.

#### Typical features

- Cider houses are frequently incorporated into other buildings ranged around the yard. Where the cider house is a separate building it usually does not have any particular external characteristics, other than a wide doorway allowing for the passage of barrels.
- Occasionally the cider mill and/or press survives within the building.
- On farms where cider was grown for export cider houses could be built with a storage area for barrels.

- Cider houses are often difficult to distinguish from other storage buildings on the farm.
- Examples where the cider mill or press survives in situ are of high significance.



The map shows the main concentrations of cider houses identified as listed buildings in the southern West Midlands and the south west of England. © Crown Copyright and database right 2013. All rights reserved. Ordnance Survey Licence number 100024900.



Wide doorway to a cider house with a first-floor fruit loft near Bromyard, attached to a stable on the right and at right-angles a hop kiln. Photo © Joan Grundy



A cider press, for squeezing the juice from fruit crushed in the mill.  $\ensuremath{\mathbb{C}}$  Jeremy Lake



Cider barn to the east of Dartmoor, with a taking-in door accessed from the orchard to the left gable, a wide doorway to the cider mill and an open-fronted barrel store. Photo © Philip White



A cider mill, around which a horse pulled the millstone for crushing fruit fed into the trough. Jeremy Lake

#### FRUIT LOFTS AND CELLARS

Fruit could be stored in the loft of the farmhouse or in a cool cellar. This example from the Wyre Forest in Worcestershire, where many smallholders were engaged in the production of fruit and cider for export, is incorporated in the cellar of a fine early 18th century brick house.



Purpose-built stores, mostly for apples, on the upper floor of a building whch resembles a cart shed or as a store raised above the ground. They are usually detached from the farmstead, and may be located within the orchard. Surviving examples are mostly mid-late 19th century, and very rare,

Orchards are sited close the farmsteads in this map of a part of Alfrick on the fringe of the Malvern Hills, indicating the potential for cider houses within them. This area consists of a mixture of woodland (some being regenerated woodland on former common land), remnants of common and small-medium sized irregular fields created through the piecemeal enclosure of former arable from the 16th/17th centuries. Some straight boundaries suggest that these fields have been subject to some reorganisation. This is an area of predominantly dispersed settlement. Map based on OS 2nd Edition 25'' map © and database right Crown Copyright and Landmark Information Group Ltd (All rights reserved 2005) Licence numbers 000394 and TP0024



Early 18th century cottage with apple loft and apple cellar in the Wyre Forest, Worcestershire. Photo © Worcestershire County Council



A fruit store at Crowle, raised above the ground to keep the crop dry. Photo © Worcestershire County Council



#### DAIRIES AND CHEESE ROOMS

A dairy is a detached building, or more often a room at the rear of the farmhouse, used for the cool storage of milk and its manufacture into butter and/or cheese.

Dairying for urban markets was already a specialised enterprise by the 1750s. Commercial cheese making and foreign imports (from the colonies) made inroads from the 1860s, and by around 1914 very little was being produced and sold from farms. The sale of liquid milk had become massively important in many areas by the early 20th century. The stand for milk churns, and the abandonment of all but a handful of farmhouse dairies and cheese rooms for new milk-production plants were the other visible consequences of these developments.

#### Typical features

- Wide doors.Ventilated and/or shuttered windows and verandhas to aid cooling.
- Internal slate shelves and brick/stone floors to keep milk and interior cool.

#### Significance

- Complete surviving examples with original fixtures, such as slate or stone shelves for cooling the milk, are very rare. This is because changes in hygiene regulations and the centralisation of production through the 20th century had a major impact on dairies, with the majority becoming redundant to their original use.
- Ornate dairies may form part of estate home farms.

#### CHEESE ROOM

A separate cheese room could also be provided in a loft above the dairy or in the attic of the farmhouse.

#### Typical features

• A room with shelves for storing cheese, and sometimes with a hoist for hauling the heavy cheeses into or out of the loft.

#### Significance

• Intact examples are very rare.





Dairies tend to only be externally recognisable buildings on home farms or planned farms of large estates where they could be architecturally distinctive. Photos © Bob Edwards



A stand for milk churns, often built at the farm gate to save the milk cart or lorry from having to come to the farmstead. Examples are still common.

#### DOVECOTES

Dovecotes are usually square or circular towers with pyramidal or conical roofs for housing pigeons and their manure, or are incorporated into the walls of other buildings such as stables and barns.

#### Typical features

- Dovecote doorways were low to discourage the birds from flying out.
- Nest boxes, in the earliest examples were formed in the thickness of the wall but usually in stone, brick or wood.
- A potence, a central pivoted post with arms supporting a revolving ladder, provided access to the nest boxes for collection of the young birds (squabs) and eggs.

#### Significance

- Timber-framed dovecotes have been subject to the greatest rate of loss over time, and are now extremely rare.
- Surviving internal fitments are of great rarity, notably potences and removable wooden nest boxes.



A restored late medieval circular dovecote forming part of a former manorial site in the South Coast Plain. Photo O Bob Edwards





The interior of a mid 17th century dovecote in the Berkshire and Marlborough Downs showing the chalk block nesting boxes and the revolving ladder support, a rare survival. Photo © Bob Edwards

RIGHT: A dovecote above the farm office signifies the status of this substantial mid 19th century estate farm at New Beswick, close to the river Breamish in Northumberland. Photos © Jen Deadman



Seventeenth-century timber-framed dovecote in Herefordshire. Internally the nest boxes of this building are made from stone rubble, but wooden nest boxes and, in East Anglia, clay bats forming the nest boxes are also found. Photo © 149817 Mr Chris Tresise, taken as part of the Images of England project

The map shows a concentration of listed dovecotes, most of which are of 17th century or earlier date, within the central strip of village England (bordered by the red lines) where arable fields covered a greater proportion of the farming landscape and manorial control was strongest. Area 1 shows a concentration that extends from the Cotswolds to the arable vales that extend into the Herefordshire Lowlands to the west and the Thames Basin to the east. There is a similar eastwards extension (Area 2) from the East Anglian Chalk into the claylands of Essex where corn was historically more important than in other parts of the East Anglian clays. In some areas there are higher numbers of 18th and 19th century dovecotes, such as in the estatelands of Northumberland (Area 3) where they are associated with large planned farmsteads. © Crown Copyright and database right 2013. All rights reserved. Ordnance Survey Licence number 100024900.



18th and 19th century ornamental dovecotes were built to advertise the status of their owners, and are strongly associated with manor or gentrified farmsteads. Photo © Bob Edwards





Nest holes for pigeons can be located in the gable end of stone-built buildings such as barns and stables, but are rarely associated with timberframed buildings. Photo © Bob Edwards



#### DUTCH BARN

A timber or iron-framed, open-fronted building for the shelter of hay or straw.

#### Typical features

• Iron frames, sometimes with a manufacturer's nameplate or relief moulding, with corrugated-iron roofing and sometimes side walls.

#### Significance

• These are highly distinctive buildings with a widespread national distribution but concentrated in the wetter western half of England. Any documented pre-1880s examples will be rare.

#### FORGE

A building housing the ironworking processes of a blacksmith. Most farmsteads used the services of a blacksmith in a local village or hamlet but on larger isolated farms in areas such as the chalk downs a forge may form part of the farmstead, the blacksmith visiting the farmstead to shoe the horses and repair tools and equipment.

#### Typical features

- Forges required wide doorways and access to a water supply.
- They were built to serve farming and rural communities, and were also built on large estate farms.
- They required bellows for working the forge and benches for working.

- Examples with internal fitments (bellows, hearth) are rare, and those with internal racks for forge implements rarer still.
- Associated with the forge there may be features such as a wheel clamp for fitting iron tyres to cart wheels.





Large isolated farmsteads, as here in the South Downs, often had their own forge where implements could be repaired and a visiting farrier could shoe horses. Farmsteads in villages usually had access to a forge within the village serving the wider community. Photos © Bob Edwards



A holloway leads to this isolated forge to the east of the Yorkshire Dales. Photo Jen Deadman



A feature sometimes associated with a forge is a wheel clamp used for putting an iron tyre onto a cart wheel. The hub is inserted into the central hole where it can be fixed with the rim of the wheel lying on the metal plate. Photo © Bob Edwards



A forge on a large farmstead to the east of the Cheviots, sited next to a cart shed range and typical of those found on the large farmsteads that developed in this and other parts of north east England. Photo © Jen Deadman

#### GRANARY

A building, or first-floor room in a building, for the dry and secure storage of grain after it has been threshed and winnowed. The size of the granary provides an indication of the arable acreage of the farm.

#### Typical features

- Ventilated openings either louvres, shutters, sliding vents or grilles.
- If the granary was detached, it would be kept dry and protected from vermin by being raised on arches or mushroom-shaped **staddle stones** these being most common in the chalk downs and arable vales of southern England.
- If the granary was sited in the loft of a working building, it required substantial external steps and/or a hoist for pulling up or lowering the heavy sacks of grain.
- Close-boarded or plastered and lime-washed walls internally, and a strong load-bearing floor construction with tight-fitting lapped boards to prevent loss of grain.
- Grain bins, or the slots in vertical timbers for horizontal planking used to make them, may survive.

#### Significance

- Some very rare surviving evidence for granaries in the floored ends of barns in corn-producing areas.
- Granaries were a common building type on arable farmsteads, typically found in association with cart sheds or in combination ranges.
- Most examples are of 19th-century date, earlier examples being of great rarity.



Detached 17th or early 18th century granary from south Hampshire built on staddle stones. Photo Bob Edwards



By the 19th century it was common for detached staddle granaries to be built with weatherboarded walls. © English Heritage



Rare surviving example of a 17th century granary, from the Breckland of Norfolk, set over a combined stable and granary. Photo Mike Williams/ English Heritage

#### HAY BARN

An open-fronted building for the storage of hay. The objective, whether the hay was stacked outside or under a roof, was to prevent moisture entering the centre of the stack or heap of hay.

#### Typical features

- Most comprise open-sided structures with roofs supported on high brick, stone or timber piers.
- Early 18th century and earlier examples in timber can be open-fronted, with an overhanging roof and sometimes a high 'skirt' of planks or other material to protect the bottom of the hay stack from rain and moisture.

- Most examples are mid-late 19th century, and concentrated in the western half of England.
- Recent recording has revealed evidence for 18th century and earlier timber-framed hay barns in the Hampshire Downs and East Anglia.



An early-mid 19th century hay barn of a type found around the Lake District, this example being located in the South Cumbria Low Fells. Photo © Jen Deadman



A mid-late 19th century hay barn on a planned farmstead built to house a large herd of dairy cattle, and the hay needed to feed them, in north Shropshire. Hay barns of this type, with brick piers or (as here) timber posts, are commonly associated with the large dairying farmsteads of this period found across the plains of Lancashire, Cheshire, Shropshire and Staffordshire. Photo © Jeremy Lake



Recent fieldwork in Suffolk has found evidence for field barns which were converted into barns for storing and threshing corn in the late 18th and 19th centuries. They are virtually indistinguishable from barns, but 18th century and earlier maps can show them located within cattle pastures. Photo © Steve Podd

#### HOP INDUSTRY

Beer brewed with hops became popular in the I 6th century. Before that it had been flavoured with herbs and spices. Beer was the main drink of the majority of the population as water was rarely fit for consumption, and tea and coffee had not yet become a national institution. Hops were grown on a small scale in many parts of the country but Herefordshire and Worcestershire and Kent and Sussex became the two major areas of production, with east Hampshire developing into a third, much smaller, area of hop growing. Nearly every farm in Kent had its own hop garden but the Weald was best suited to growing hops on an industrial scale. Hop-growing was capital intensive, and woodlands were often replanted with chestnut for hop poles.

A demise in hop-growing in the late 20th century resulted in many hop gardens being grubbed out. As a consequence, hop pickers' huts, cookhouses, **oast houses** (or **hop kilns** as they are known in the West Midlands), **tar tanks** and other associated features have either been demolished, left to decay or, as in the case of many oast houses, converted to residential accommodation.

Farmsteads that retain a range of buildings associated with the hop industry are highly significant.

#### HOP INDUSTRY – OAST OR HOP KILN

A building in which hops are dried and stored. The drying of hops was a delicate process, requiring skill in managing the fire to maintain the correct temperatures. The dryers would often work round the clock, catching up on their sleep in the oast.

#### Typical features

An oast comprises:

- A square or circular kiln, with a cowl on the roof that would extract air though the slatted drying floor on which the hops were laid.
- An attached 'stowage' where the dried hops could cool on the upper floor before being pressed into suspended 'pockets'. The ground floor could be used for storage or was open-fronted and served as a cart shed.

#### Significance

- Early purpose-built oasts, small buildings which included a kiln and rooms for the green and dried hops, are extremely rare.
- Evidence for early kilns may survive in some threshing barns.
- Surviving kilns are extremely rare.
- Only a small number of unconverted oast houses survive.



The distribution of listed oasts, also termed hop kilns, shows those areas where hop production was geared to an industrial scale – in a wide area extending from east of the Malverns and into Herefordshire, focused on Bromyard (1), around Alton at the junction of the Hampshire Downs and the Wealden Greensand (2), and especially dense being the concentration around the eastern Weald and extending as a scatter across the Kent Downs into a further concentration along the North Kent Plain (3). There are fragmentary remains of late 18th and 19th century hopkilns in southern Suffolk and north Essex, extending from Stowmarket towards Braintree (4). © Crown Copyright and database right 2013. All rights reserved. Ordnance Survey Licence number 100024900.



Circular kiln attached to stowage in the Low Weald. Photo © Bob Edwards



Square kilns, as here near Bromyard in Herefordshire, were introduced in the early 19th century. Photo C Jeremy Lake

#### HOP PICKERS' HUTS

Before mechanised picking was introduced in the 1950s, the harvesting of hops was a very labour intensive business and around it grew the 19th and 20th-century tradition of the industrial working class from towns and cities arriving in the autumn to pick hops and also soft fruits. Women and children commonly travelled independently of the men, who joined their families at the weekend.

Accommodation for these people was in the first instance rough canvas tents or converted animal sheds, but in the late 19th century moves were made to improve conditions, with purpose-built **hop pickers' huts**. These were usually sited away from the farmstead or at best on its fringe.

#### Typical features

- They are single-storey structures with rows of doors and windows to small rooms.
- Communal kitchens may be located at the end of the range or in detached buildings.
- A privy would usually be sited in woodland a little distance from the accommodation.

#### Significance

- Surviving groups of hop pickers' huts are rare.
- Hop pickers' huts associated with coherent farmstead groups with other hop industry structures (eg oast houses) are highly significant.

#### **TAR TANKS**

Tar tanks can be found in the fields close to oast houses. Creosote for preserving the ends of hop poles was not generally available until 1862 and did not become widely used until the late 19th century. To aid the penetration of the tar into the wood, it was heated in tanks and the poles held in the liquid supported by a wooden frame.





Ranges of early 20th century brick-built hoppers' huts. Photos: © Bob Edwards





Hop pickers' huts shown on the 2nd edition Ordnance Survey maps. Map based on OS 2nd Edition 25'' map © and database right Crown Copyright and Landmark Information Group Ltd (All rights reserved 2011) Licence numbers 000394 and TP0024

#### HORSE ENGINE HOUSE

A round or polygonal building containing a horse engine used for powering threshing machinery following its invention in 1786. These were usually attached to existing barns and the equipment was also used for chopping and crushing fodder.

#### Typical features

• Horse-engine houses comprise semi-circular, polygonal or square projections from barns, on the side facing the **stack yard** and opposite the **cattle yard**.

- Horse engines, as found in wheelhouses, and *in-situ* threshing or winnowing machines, are exceptionally rare.
- The uptake of horse-powered machinery varied across the country. In areas where labour was expensive mechanisation found favour, horse-engine houses and evidence for water power being most common in the lowlands of Yorkshire and the Humber and north east England, in parts of the West Midlands and in the south west peninsula (especially Cornwall). In the southern counties, where labour was cheap and abundant until the 1850s or later, few barns bear evidence for the introduction of machinery.



Rare surviving gearing in a horse-engine house. Photo © Mike Williams/ English Heritage



This horse-engine house forms an integral part of a bank barn in south Devon, typical of south-west and north-west England. Note the pitching door from the stack yard to the upper threshing area where the threshing machine was located, above the cattle housing. Photo © Jeremy Lake

#### KENNELS



Farm dogs were accommodated in recesses beneath steps that led up to lofts, and rarely in their own kennels as here in the Lake District. These are mostly found in upland areas. Photo © Jen Deadman



Kennels for hunting dogs are found in areas where hunting was practised on estates and are typically low, single-storey buildings with attached individual yards enclosed by metal railings. Complete example are rare. Photo © Jeremy Lake

#### DETACHED KITCHEN

These are detached buildings sited close to the house that may have originated as dairies or – often in the 16th and 17th centuries – as detached **kitchens** for brewing, baking and other purposes.

#### Typical features

- These are typically sited close to the farmhouse, and served by a chimneystack.
- Internally they may retain a large fireplace and associated copper for brewing and other purposes.

#### Significance

 Remaining examples represent important survivals of well-documented traditions in some areas for these buildings.



A rare survival of a detached kitchen to the rear of a High Weald farmhouse. Such buildings will often have smoke-blackened roof timbers to at least part of the roof and may have been partly floored. The stack at the gable end is a later addition. Photo © Steve Podd, FWAG

#### LONGHOUSE

A building with a shared entrance for humans and cattle under one roof, the **cow house** being usually built downslope from the accommodation.

#### Typical features

- Originally built with a shared entrance to a through passage for humans and cattle. This is typically sited below the chimneystack.
- The cow house is usually marked by a central drain and a manure outlet at the lower gable end.
- As living standards changed the animals were often provided with separate access. This development could also result in the demolition of some **byres** and the conversion or rebuilding of others to domestic or new agricultural use (**barns**, for example).
- The basic longhouse plan exerted considerable influence on the subsequent evolution of farmhouses, and the piecemeal rebuilding and conversion of both lower end and house-part is often clearly visible in the buildings.

- Surviving examples are highly significant.
- Longhouses were often found grouped together in farming hamlets and associated with strip farming of the surrounding fields. Documents and archaeological excavation indicate that they had a widespread distribution in the north and west of the British Isles in the medieval period. In much of lowland England they were either absent or being replaced by yard layouts with detached houses, barns and cow houses from the 14th century.
- Surviving examples with integral cattle housing are of extreme rarity.



The map shows that the distribution of firmly-identified longhouses is now largely restricted to parts of western and northern England, especially but not exclusively in upland and upland fringe areas, the former extending into adjacent parts of Wales. © Crown Copyright and database right 2013. All rights reserved. Ordnance Survey Licence number 100024900.







Sanders in Lettaford is one of the best-preserved longhouses in Dartmoor, now in the care of the Landmark Trust. It was built in the early 16th century, with the shippon to the right of the porch. The lean-to porch was its shouldered arch is probably original. Parallel to its north is a range comprising a late 18th-early 19th century barn, stable, cartshed and pigsties. Photo © Jeremy Lake



Higher Uppacott at Poundsgate is one of a group of four longhouses sited along the same lane in Dartmoor. The early 16th century house is built into the sloping ground, and the photograph shows the ventilation slits to the well-preserved lower shippon end which retains its central drain © Dartmoor National Park Authority

#### MALT HOUSE

A low-ceilinged building for the malting of barley before brewing, specifically for the germination of the crop on malting floors and then drying in a kiln. After the early 19th century malt houses were rarely built on farms as the malting industry became concentrated in urban areas where larger breweries developed.

#### Typical features:

- Steeping tanks where the barley would be soaked to swell the grain prior to being laid out to germinate.
- A kiln to heat the germinated barley.
- The malting/drying floor would be slatted or made of perforated tiles to allow warm air from the kiln to pass through the barley to stop germination.

#### Significance

- Surviving rural malt houses are rare and significant.
- Any examples that retain internal features such as steeping tanks, kilns or drying floors are of high significance.



A malting in Cambridgeshire, showing the kiln in the foreground (East Anglian Chalk). Photo © Susanna Wade Martins



A rare example of a 19th century malthouse located on a village farmstead in the Marlborough Downs of Wiltshire that retains its characteristic cowled vent to the drying chamber. With the loss of this feature, it would be difficult to identify the function of this building without an internal inspection. Photo © Bob Edwards

#### MILL

A building for the milling of corn into flour, powered by either water or wind. Mills were either water powered or wind powered. The presence of fast flowing rivers and streams mean that water power was favoured but wind mills were also built, their presence remembered by topographical names such as 'Mill Hill'. Some mills on farmsteads may have originated for the fulling of cloth.

#### Typical features

- A structure of two storeys or more with storages areas for the grain and milled flour, the mill machinery and associated water wheel.
- Watermills are typically associated with water management features such as mill ponds to provide a sufficient head of water and leats which may take water from a river some distance upstream.

#### Significance

- Watermills were rarely built on farms and so are highly significant where they form part of a farmstead group.
- Examples with surviving machinery and/or waterwheels are of extreme rarity.



A mid 19th century mill dominates this farmstead in Yorkshire's Howardian Hills, and is attached to a brick cartshed and granary to the left. Photo © Jen Deadman



Watermills are not usually part of a farmstead but in the Blackmoor Vale and Vale of Wardour there are a number of farmsteads with a mill. Photo © Bob Edwards

#### **PIG HOUSING**

Structures providing secure housing for pigs.

On most farms only a few pigs were kept for domestic use and here they were normally fed on kitchen scraps or whey and so **pigsties** were often placed near the kitchen or dairy. Pigs were most commonly kept in dairying areas or market-gardening areas, such as the Fens, where whey (a by-product of dairying) or potatoes were available for feed. Larger-scale **piggeries** were found on larger farms where commercial fattening was practised. Imported feed sustained the growth of the pig industry in the inter-war period, more specialist producers taking the 'Danish' or 'Scandinavian' system as a model for the industrial housing of pigs. The American battery system of housing poultry was used for pigs from the late 1920s.

#### Typical features

- Pigsties were typically built as single-storey structures comprising individual boxes with their own individual yards.,They were built individually or more commonly in rows and could be served by external feeding chutes.
- Some had upper floors with poultry houses. The combination of a hen house located above a pig house was described as a **poultiggery** in some areas (for example in North Shropshire and Northumberland).
- A small chimneystack could mark the position of a boiler house for boiling swill for pig feed.

- Any pre-19th-century examples are very rare.
- Significant if part of coherent farmstead groups.



A pigsty in the North York Moors, with feeding chutes. Photo  $\textcircled{\mbox{\rm C}}$  Jen Deadman



A range of 19th century pigsties built on a large farm in the South Downs after the farm moved to dairying. Photo Bob Edwards



A large-scale piggery. A chimneystack marks the position of a meal house (also called a boiling house) for preparing feed, with access to a feeding passage. © English Heritage



Pop holes to a hen house above a pigsty in north Shropshire, an unusually decorative arrangement. Photo © Jeremy Lake



Pigsties with a hen loft in Dartmoor. Photo © Philip White

#### POULTRY

Hens usually ran freely about a farmyard, but were encouraged to nest safely away from predators and so that the eggs could be more easily collected.

The combination of a hen house located above a pig house was described as a **poultiggery** in some areas (for example in North Shropshire and Northumberland). Geese could be housed in free-standing pens or alcoves in farmyard walls.

#### Typical features

- Hen houses usually include a small pop hole for the hens as well as a full-sized door for human access for feeding and egg-collection.
- The walls could be lined with nest boxes.
- Geese could be housed in pens, either free-standing or built against a wall.

#### Significance

- Hen houses were usually relatively short-lived buildings and there are few survivals that can be described as historic.
- Where historic examples do survive they usually form part of another building, such as a pig house: it was thought the chickens would keep the pigs warm and the pigs would frighten foxes away.
- Historic pens for geese are also rare and significant.



Goose pens in Herefordshire. Photo © Jeremy Lake



This drawing of a Lincolnshire pigsty shows a hen loft with secure internal access to collect eggs. © English Heritage

#### ROOT STORE

Room or cellar for storing root crops, which were widely introduced as part of improved crop rotations and for the feeding of cattle in farmsteads from the later 18th century.

#### Typical features

- A room incorporated within the farmstead, usually in cattle housing or a combination barn, or a separate building. The latter are more easy to identify, and appear to be concentrated in north east England.
- Earth-covered root stores are found in the Pennines and the moorland fringes of Devon and Cornwall, either on farmsteads or isolated.

#### Significance

• Significant as an integral part of improved farmyard planning.



Double doors enabled roots to be tipped into this root house on a planned farmstead in the Tyne Valley in Northumberland, from which it was distributed to the cattle yards. Photo © Jeremy Lake



A root store on a farmstead in the Washburn valley, east of the Yorkshire Dales. Photo © Jen Deadman

#### SHEEP HOUSING

There is widespread archaeological and documentary evidence for medieval sheep houses, called berceries, concentrated in upland and downland areas, but otherwise evidence for sheep housing is very rare and limited to:

- Shelter sheds with low eaves, either on the main farmstead, as isolated buildings or part of outfarms.
- Field barns for yearling sheep known as hogg houses.

Barns, when empty, were sometimes used for shearing and sorting the wool. Fleeces were often stored in first-floor lofts including in granaries when not in use for storing grain. Areas associated with sheep husbandry were often provided with sheepfolds, walled or fenced enclosures for containing sheep, and sheepwashes for cleaning the wool prior to shearing. Sheep washing was often carried out in ponds or streams where the watercourse might be artificially deepened or walled or, more unusually, in specially constructed tanks. Enclosures funnelled towards the water's edge have been found. In areas where watermeadows were a feature of the landscape sheep dips are sometimes found built into the system of leats and sluices. Some of them may date to the medieval period but most are 17th century or later. Prior to the introduction of dipping, introduced from the 1830s but only becoming general in the early 20th century, sheep were protected from lice and scab through salving, which involved the application of boiled tar and tallow. This could be done in other farm buildings, although a small number of salving sheds (resembling shelter sheds) have been recorded in the Lake District.



A rare example of rams' pens on a South Downs farmstead. The low shelter shed is served by a series of small yards. Photo © Bob Edwards



An outfarm bordering the Dorset Downs, the low eaves to the shelter shed suggesting that it was intended for sheep. Photo © Bob Edwards



A single-storey shelter shed and (in the foreground) an attached hay barn in Lunedale, North Pennines. Jeremy Lake





A hogg house in the Lake District. In remote upland areas of northern England a building similar in appearance to a field barn was provided for yearling sheep (called hoggs). Hogg houses are distinguished from most field barns by much lower floor-to-ceiling heights and sometimes associated yards and enclosures for sorting sheep. The upper floor could serve as a hay loft, but if accessed from a bank it could also accommodate more sheep. Photo © Jen Deadman



Upland farmsteads can relate to complex systems of walls for the movement, handling and containment of sheep, as here in Nidderdfale. Photo © Jen Deadman

#### SILAGE CLAMP AND TOWER

Airtight containers for the storage of freshly cut grass and its conversion into silage were first developed in the 1880s, after its initial use elsewhere in Europe. Silage afforded the opportunity to cut and store grass for bulk fodder without the risk of poor weather or storage conditions spoiling the hay or root crop.

#### Typical features

- Silage clamp An airtight container for the storage of freshly cut grass and its conversion into silage. Silage clamps were brick or concrete walled structures, in which the silage would be placed and then covered over.
- Silage tower A tower for the airtight storage of freshly cut grass and its conversion into silage. A silage tower is recognisable as a tall structure. Tower silos were introduced from the United States in 1901, but were not in general use until after the Second World War.

#### Significance

- There is at least one example of a silage clamp in mass concrete of the 1880s, otherwise they are modest structures.
- Intact examples of silage towers of 1940 or earlier, using concrete or displaying a degree of architectural elaboration, are rare.



Photo © Paul Stamper

#### **SLAUGHTERHOUSES**

laughterhouses are uncommon, most documented examples having been built on large farmsteads and the home farms of estates.

#### Typical features

- These are single-storey buildings, usually detached, which have no distinctive external features other than sufficient access (a single door) and light.
- Internally a high ceiling with a pulley wheel to raise the carcass.

#### Significance

• Documented examples are rare, and will have significance as part of complete groups of farm buildings.



This slaughterhouse is part of a large late 19th century planned farmstead west of Hartlepool, its exterior revealing little of its original function. Photo © English Heritage

#### STABLE

A building, or part of a building, for housing horses and their harnessing and tackle. The largest **stables** are concentrated in corn-producing areas, where farms were larger and more horses were need for ploughing and many other tasks. Fewer horses were needed in cattle-rearing or dairying areas.

After the barn, the stable is often the oldest building on the farmstead. A few stables dating to before 1700 have been identified in local surveys, while many more date from the 18th century. One of the reasons for this rise in number was the decline in the use of oxen.

#### Typical features

- Earlier stables are usually two-storey and well-lit buildings, with ground-floor windows, pitching openings and ventilation to the hay loft. Many are timber-framed and weatherboarded with brick and stone examples dating from the 18th century onwards.
- Early examples have the stalls across the end walls, whilst in examples dating from the later 18th century onwards the stalls are usually along the side walls, allowing more scope for lengthening the building and thus housing more horses.
- Stables dating from the 17th and 18th centuries are also found as part of combination barns and other buildings.
- Single-storey stables, commonly with cast-iron ridge vents, were built from the later 19th century.
- Stables can be distinguished from cow houses as they have tall and relatively narrow doors.
- Wooden or cast-iron (for high-status or late examples) stalls with access to manger and hayrack.
- Floors of earth, stone flags/cobbles and from the mid-19th century of engineering brick, sloping to a drainage channel.
- Pegs for harness and tack, sometimes in a separate harness room with fireplace.
- Sometimes chaff boxes for storing feed, and cubby-holes for lanterns, grooming brushes, medicines etc.



I 7th century stable at Stoke-sub-Hamdon in Somerset. Photo  $\textcircled{\sc opt}$  Jeremy Lake



Stable with hay loft in Weardale, North Pennines. Photo  $\ensuremath{\mathbb{C}}$  Jeremy Lake



Loose boxes for horses on a stud farm in north Shropshire. Photo © Shropshire County Council



Stable with loft over with stalls across the end walls. © English Heritage



Late 19th century single-storey stable with stalls along the side walls. © English Heritage

#### Significance

- After the barn, the stable is often the oldest building on the farmstead.
- A few stables dating to before 1700 have been identified in local surveys, while many more date from the 18th century.
- The largest stables were built on the larger cornproducing farms.
- Examples retaining internal fittings including stall partitions and feed racks are rare and significant.



A very rare 17th century timber-framed stable in north Hampshire. Photo © Bob Edwards

#### STACK STAND

Raised platform on which hay, corn, peas etc were raised out of the reach of vermin and thatched to protect from rain. Stacks were termed ricks in some parts of England. Surviving examples are extremely rare.



Stack stand in Dartmoor. Photo © Jeremy Lake

#### STADDLE BARN

A threshing barn, usually timber-framed and raised on staddle stones. Staddle barns date from the later 18th and early 19th centuries and may be an attempt to counter the greater predation of the brown rat. They are concentrated in the chalk downland areas of Hampshire, Berkshire and Wiltshire.

#### Typical features

- Timber-framed and weather boarded buildings, notably larger than granaries, set on staddle stones.
- Typically have double doors to at least one side of the threshing bay with a single door to the other side to create a through-draft.

#### Significance

• Staddle barns are a high significant building type that is only found, in limited numbers, in central southern England and so are rare in a national context.



A 19th century staddle barn in the Hampshire Downs. Photo © Bob Edwards

#### WELL HOUSE

A building over a well housing machinery for raising the water, most commonly found in the chalk downs or wolds.

#### Typical features

- Well houses covering a well head are often simple structures of brick with no notable external features.
- They may be identified by their position within a yard, usually near to the house.

- Surviving examples are very rare.
- Well houses with donkey wheels are extremely rare and are highly significant.



A very rare surviving example of a well house, in the South Downs, powered by a donkey wheel. Photo Bob Edwards



On some farms the well was covered by a small building keeping animals and children away from the well or pump. Photo Bob Edwards