Decoding the landscape

Introduction

Excavation is a means by which archaeologists determine the extent of an ancient site and unravel its chronology by identifying the earliest layers of occupation and those which have been deposited more recently. Through field survey, through mapping from aerial photos and by studying old maps, we can do the same for the landscape as a whole. We recognise that the landscape around us has undergone many changes and is imbued with historical meaning. The settlements of today and the fields and sacred sites are built on top of precursors dating back many centuries. There are many examples in Cornwall where the imprint of these changes can be seen; where present day use of the landscape is overlying earlier signs of human activity that date back thousands of years.

Time depth in the Cornish landscape. The ploughed-over curvilinear banks are the remains of the fields of an abandoned Bronze Age farm on the slopes of Sharp Tor on Bodmin Moor. These are overlain by a straight bank running diagonally from right to left; this is a prehistoric pasture boundary forming part of a coaxial field system. The hedged lane is medieval in origin and the straight-sided fields above this were laid out in the eighteenth or nineteenth centuries. Photo © Cornwall County Council Historic Environment Service

The surviving character of today’s landscape reflects human interaction through time. In parts of West Penwith, for example, the present day field systems are laid out over the lines of field boundaries first built in later prehistory. Steep valley sides covered in ancient woodland were probably not cleared in prehistory and will have been used as a source of fuel, coppice wood and timber. Rough ground on the moors and cliff tops was used for grazing; some still is, but some areas have been brought into agriculture over the last few hundred years.
A useful way of understanding the development of the landscape is provided by Historic Landscape Characterisation. The modern landscape can be described, or ‘characterised’, according to continuation of land use and the historic processes that have gone to make it the way it is. The West Penwith field systems which are prehistoric in character are formed by a network of small irregular fields, in complete contrast to the rectangular, straight-sided fields which characterise the areas of rough ground taken into agriculture in more recent times.

Historic Landscape Characterisation tells us that the greater part of the Cornish landscape was cleared and farmed in prehistory and this ancient landscape, termed Anciently Enclosed Land, has formed the farming heartland to this day. Most Anciently Enclosed Land takes its character from the laying out of communal strip fields in medieval times. The irregular sinuous character of medieval strip fields has been preserved by the enclosure of these strips between the fourteenth and seventeenth centuries.

During the medieval period roughly a third of Cornwall was covered by Upland Rough Ground. This land had been cleared of trees and settled and farmed in early prehistory. Deterioration of the upland soils led to the abandonment of many of these ancient farms and rough ground, during later prehistory and the medieval period was exploited as a source of summer grazing and for fuel. Large areas of rough ground were broken into agriculture from the eighteenth century onwards. This land is characterised as Recently Enclosed Land. The stimulus for this expansion in agriculture came from the wealth and increased demand resulting from the growth of the Cornish industries from this time.
Many of the recent enclosures were the smallholdings of industrial workers, but the most widespread farming settlements of this period are new farms which generally have large rectangular fields with dead straight sides.

*Straight-sided fields typical of Recently Enclosed Land around Hingston Downs, Calstock. Photo © Cornwall County Council Historic Environment Service*

**Landscape Characterisation**

Cornwall’s landscape has been enriched by centuries of change and modification, all brought about by human activity. Archaeologists recognise that all of Cornwall (and all of England) is an ever-changing landscape imbued with complex historical meaning. Increasingly this wider landscape view has influenced the way we study past societies, with a move away from the confines of selected areas or sites of special importance to a consideration of the bigger picture of the historic environment as a whole.

A method for understanding the nature of the landscape through its historical development was pioneered in Cornwall in 1994. The method – Historic Landscape Characterisation (HLC) – has rapidly developed into a national programme which is now funded by English Heritage. Historic Landscape Characterisation interprets and maps the present day landscape in terms of the historic processes which have created it. It does not define the former extent of prehistoric or medieval field systems; rather it illustrates where today’s landscape is broadly prehistoric or medieval (or more recent) in origin and in surviving character. It provides an interpretation of the whole landscape and the processes of human action that have shaped it through time, and allows the landscape to be given archaeological significance on a wide scale.

Cornwall’s National Mapping Programme was carried out after Historic Landscape Characterisation had been completed, but the results of our mapping from aerial photographs have been used to refine and complement the landscape character map.
The historic landscape at Harrowbarrow, Calstock. The sinuous fields in the foreground are medieval in character, whilst the rectangular, straight-sided fields in the distance are of more recent, probably nineteenth century, origin, enclosing areas of former rough ground. Photo © Cornwall County Council Historic Environment Service

**Historic Landscape Character Zones**

Cornwall’s historic landscape was mapped and described using a number of categories of landscape character. These categories could be endlessly subdivided according to the components which make them up, so compromises were made in order that the characterisation might be applied consistently over the whole county. Three layers of landscape character mapping were produced: **types** provide the most detailed representation of historic landscape character; **zones** simplify and generalise the types; **areas** are more general still and comprise relatively large blocks of landscape.

The different ways in which the landscape character mapping is used dictate which layer is the most appropriate. When a small area of landscape is being studied, the historic landscape types would be the most useful. When considering larger chunks of landscape or when taking a more generalised appraisal of Cornwall’s historic landscape the historic landscape zones are more suitable. And in looking at how aerial photos help us to decode the landscape the zones map is a good starting point.

The zones map illustrates how much of the Cornish countryside is in reality an ancient landscape; modern features – settlements, fields, sacred sites – are built on top of precursors that date back many centuries. By far the most widespread zone is Anciently Enclosed Land (shown in light green on the zones map). This is the agricultural heartland containing farms documented before the seventeenth century and characterised by irregular field patterns with either medieval or prehistoric origins.
The Cornwall Historic Landscape Character Zones map

Much less widespread is Recently Enclosed Land (shown in dark green). This is land (usually former upland rough ground) enclosed by fields in the seventeenth to twentieth centuries. Most was taken in from rough ground in the nineteenth century.

Upland Rough Ground (shown in yellow) is an important component of the historic landscape and was used over the centuries for summer grazing and as a source of fuel. Superficially it may appear to be a natural habitat. Upland heaths were, however, formed directly by human interference. Environmental evidence demonstrates that former woodland cover was cleared during prehistory for arable and pastoral farming and that, as a result, upland soils quickly deteriorated through nutrient loss and leaching. Probably by the end of the Bronze Age, around three thousand years ago, peat was forming and the vegetation of the uplands had settled into its present-day open, heathy form.

A significant feature of the Cornish landscape is the steep-sided valleys which extend inland from creeks or coves into the heart of the countryside. The slopes of these valleys are frequently densely wooded; these woods would have provided sources of coppice wood, fuel and timber. In addition the map shows areas whose predominant character is urban, industrial (notably the china clay district around St Austell), or coastal rough ground and sand dunes. It also takes account of land whose historic character has been altered by extensive modern removal of field boundaries.
The historic landscape at Harrowbarrow, Calstock. The medieval-derived fields in the south are classed as Anciently Enclosed Land, whilst the rectangular, straight-sided fields in the north are typical of Recently Enclosed Land.

Archaeology in the Landscape Character Zones
Historic Landscape Characterisation interprets the historic components of today’s landscape and illustrates where the landscape is broadly prehistoric or medieval (or more recent) in surviving character. At the same time it defines the historical processes which have produced that surviving character. In doing so it offers reliable clues as to the likely extent and nature of the archaeological remains to be found in each of the Landscape Character zones.

Most areas of Upland Rough Ground, for instance, have complex histories beginning with some settlement and arable farming leading to increasingly extensive use for rough grazing, and culminating today in relative neglect. These processes have left traces of six thousand years of human activity. On Bodmin Moor and in West Penwith there is exceptionally good preservation of coherent prehistoric landscapes – both secular landscapes consisting of abandoned fields and farms, and sacred landscapes consisting of stone circles, tombs and ceremonial enclosures. There is also excellent preservation of industrial complexes in the granite uplands.

As the upland soils deteriorated, giving way to the familiar heathland character of Upland Rough Ground, so this zone was used during late prehistoric and medieval times as a source of summer grazing and as such was a vital component of the agricultural regime. It was also an important source of fuel; furze or gorse and, on Bodmin Moor and the Lizard Peninsula, peat. Peat turfs were still being cut into the twentieth century. Turfs were stacked in ricks alongside the cuttings for storage through the summer and hundreds of turf ‘steads’ on which the ricks were built survive. They are typically playing card-shaped with shallow ditches and low banks around them.
The rectangular banks of turf steads on Goonhilly Downs on the Lizard Peninsula. Photo © Cornwall County Council Historic Environment Service

Recently Enclosed Land was cut out of Upland Rough Ground and many archaeological sites will have been destroyed in the process of enclosure and farming of this land. In places, however, monuments such as Bronze Age barrows and standing stones still survive. Generally, though, because the main historical use of this zone was for rough grazing, the prehistoric and medieval archaeology here is nothing like as rich as that in Anciently Enclosed Land.

Anciently Enclosed Land is the farming heartland with early-documented settlements and field patterns with prehistoric or medieval origins. Much of this zone will have been enclosed and farmed since the later Bronze Age, around three and a half thousand years ago. Being the ancient farmland, it will also be the principal zone of ancient settlement. Of course many centuries of agriculture, including wholesale re-organisations of the layout of fields have obscured and denuded many earlier features but a rich archaeological resource lies below the ground, including prehistoric settlements and the fields of the farmers who first cleared this area.

Excavations and other archaeological investigations, particularly the mapping of sites from aerial photos, are increasingly demonstrating the richness of the below-ground archaeology in Anciently Enclosed Land. In the area around Roseworthy Barton, between Hayle and Camborne, to take one example, a landscape densely populated by prehistoric enclosed settlements and both prehistoric and medieval field boundaries was recorded during Cornwall’s National Mapping Programme. This area is exclusively within the zone of Anciently Enclosed Land. It contrasts sharply with a corresponding area of Recently Enclosed Land, in this case around Hingston Down in Calstock, where few settlement or agricultural features were mapped.
The area around Roseworthy Barton is characterised by Anciently Enclosed Land. Many prehistoric and medieval settlement features were plotted here during Cornwall’s National Mapping Programme.

The area around Hingston Down in east Cornwall is characterised by Recently Enclosed Land. Few settlement or agricultural features were plotted here; there are a few Bronze Age barrows, but most archaeological features are associated with the mining and quarrying industries.
The Prehistoric Landscape

We know that much of Cornwall was densely populated in prehistory but that most of the fields laid out during this time were reorganised and overlain by medieval and later field patterns. Even so, whilst field systems derived directly from the prehistoric field pattern are nationally rare, they have been identified in several parts of Cornwall.

Distinctively prehistoric fields can be seen in West Penwith, around St Hilary, in parts of the Lizard Peninsula and on the fringes of Bodmin Moor, Carnmenellis and Hensbarrow Downs.

Cornwall’s prehistoric farmers practiced mixed agriculture and Rough Ground formed a crucial element of the prehistoric farming landscape, providing summer grazing and source of fuel. In West Penwith the survival of the prehistoric field pattern bordering the heathy uplands provides a unique insight into a coherent mixed agricultural landscape which is between two and three thousand years old.

Historic Landscape Character map of West Penwith showing areas of prehistoric farmland where crops were grown and areas of Rough Ground where livestock were grazed.

Coaxial Field Systems

The most tangible evidence for how early societies functioned in Cornwall is provided by the field and boundary systems with which land division was organised. The earliest fields were formed by curvilinear stony banks like those found on Bodmin Moor. Field systems of this type, and the round house settlements built within them, appear to have been relatively loosely-arranged affairs, with new fields added piecemeal as the settlements grew over time. Crops were grown in the fields and trackways led from them to grazing areas beyond.
The importance of defining and controlling access to grazing land is apparent in the large-scale reorganisation of the landscape that appears to have taken place in parts of Cornwall probably around 1500 BC. Long parallel field boundaries, known as ‘coaxial’ field systems, were laid out, ending in boundary banks dividing up the pasture into large blocks. Settlements consisted of groups of round houses scattered throughout the fields, and the open ground beyond the boundary banks was used as common grazing land.

Coaxial field systems were first identified in the South West on Dartmoor where they are known as reave systems (reave is a colloquial Dartmoor term); those in Cornwall are more fragmented than the extensive Dartmoor examples. These major land divisions are interpreted as resulting from increased pressure on available resources. How widespread these pressures might have been is unclear; traces of coaxial field systems have been recognised in the Lizard Peninsula, West Penwith and on Bodmin Moor. Wooden fences have been found beneath some Dartmoor reaves and these may have been a more typical form of boundary in lowland Cornwall where surface stone would have been less available but where there would have been plentiful timber for fencing. Any traces of these fences will be difficult to find, given the effects of centuries of subsequent cultivation.

Remains of a coaxial field system and associated Bronze Age round houses on Crousæ Downs, Polcoverack on the Lizard Peninsula. Photo © Cornwall County Council Historic Environment Service

On the southeast coast of the Lizard Peninsula Much of the early field system at Lowland Point is embedded in the present-day field pattern but some of the prehistoric boulder walls and stony banks are no longer in use and are now hidden by gorse and bracken. These abandoned boundary banks were plotted from aerial photos during Cornwall’s National Mapping Programme and the whole area was also surveyed on the ground. The field pattern that emerges from this survey is clearly one of a coaxial system, with parallel boundaries orientated along a northwest to southeast axis.
The first boundaries were built on the coastal strip and were then extended upslope at least as far as Main Dale. Here the line of the present-day road may be fossilising the position of the east to west boundary bank – the ‘terminal’ boundary – which would have marked the limit of the field system. The long parallel fields were subdivided by short ‘transverse’ boundaries; some of these are at right angles to the parallel boundaries whilst others are laid out diagonally. It is likely that some transverse boundaries still in use today were added during later prehistory when there appears to have been a further reorganisation of land division in Cornwall.

The main parallel boundaries (shown in red) forming the coaxial field system at Lowland Point. Despite centuries of continuous use and modification through time, the distinctive layout of a three and a half thousand year old field system can be traced in today’s field pattern.

Brick-shaped fields
Coaxial fields with their scattered round house settlements proved an effective system of land division until some time after 1000 BC when further radical reorganisation took place. On Bodmin Moor, as on Dartmoor, the coaxial systems were abandoned, leaving the edges of those that survive as a relict archaeological landscape stranded beyond today’s farming heartland.

The episode of abandonment of the uplands at the end of the Bronze Age is often attributed to climatic deterioration, peat growth and a consequent inability to secure harvests in increasingly marginal land. Environmental factors, however, were likely to have been only one of a number of complex socio-economic forces at work. The reorganisation may also have been a response to continued increases in human populations, as well as in the herds and flocks. The re-ordering of the landscape may then be seen as ensuring the whole farming system was kept sustainable. We do not know whether this abandonment of settlement and reorganisation of land division...
was a gradual process or whether it resulted from a single wide-ranging decision to rethink the field layout and the access to upland grazing.

The new fields, often referred to as Celtic fields, were arranged into denser patterns of small, irregular brick-shaped fields which were intensively cultivated; most contain substantial lynchets - banks of earth formed by the slippage downhill of soil loosened during cultivation. The way the new field layout was organised confirms the continuing role of commons and rough ground in the prehistoric farming system. Control of the common grazing land and access to it was clearly a key factor in the system, explaining why the margins of the farming heartland were kept back from the downlands. A good example of this is the brick-shaped fields surviving as earthworks on the middle slopes of Godolphin Hill, drawn back from the higher ground on which earlier coaxial fields were located.

Godolphin Hill showing later prehistoric brick-shaped fields in the east and the earlier coaxial field system on the summit.

These brick-shaped fields are most clearly seen in west Cornwall, particularly in West Penwith. Here, in a remarkable example of landscape continuity, the main boundaries of the prehistoric field systems not only underlie the fields of today but have determined the layout of the present day fields. Along the West Penwith coast from St Ives to St Just the prehistoric field pattern is perpetuated in today’s landscape. Subdivisions of the fields were much more closely spaced than in the previous coaxial systems, and the fields developed more substantial lynchets, some reaching over two metres in height. The fields were often superimposed over the earlier coaxial systems but sometimes reused earlier orientations of lines.
Prehistoric fields at Foage, West Penwith. The surviving stony banks in the left of this photo are the remains of brick-shaped fields. To the right and towards the top of the photo subdivisions of prehistoric fields are defined by scarps or lynchets of soil build up showing as shadowy banks. The prehistoric field pattern has determined the layout of the present field system. Photo © Cornwall County Council Historic Environment Service

The settlements accompanying the brick-shaped fields were laid out differently from those associated with the earlier coaxial fields. They consisted of small groups or hamlets of round houses rather than individual houses widely scattered throughout the fields. Archaeologists describe this type of settlement as ‘nucleated’. Field systems of this type and their associated nucleated hamlets were the norm in West Penwith for many centuries. This is illustrated by settlements such as Bosigran near Morvah. Here the field system was focused on a nucleated hamlet of roundhouses which were later converted into courtyard houses in the Romano-British period.

The increasing nucleation of settlement implies that each household making up the hamlet would have had their own share of the cultivated land. The regularity of the field shapes and sizes would have made a fair distribution of land of varying quality between the households easier to achieve.

The prehistoric brick-shaped field systems were more carefully fitted into the landscape than the coaxial fields had been. Those along the West Penwith coastland were located within a ribbon of land that has been maintained as the farming heartland of all later settlements up to the present day. There seems to have been extensive co-operation between the prehistoric farming communities here; each block of fields contains equitable portions of good quality land and each block is laid out apparently mindful to the needs of neighbouring blocks.
Bosigran, West Penwith. The present day fields are derived from the prehistoric field pattern focused on a courtyard house settlement whose remains can be seen in the centre right of this photo. Photo © Cornwall County Council Historic Environment Service

The farming heartland along the West Penwith coast flanks a large area of Upland Rough Ground - open moorland heath which would have played a key role in the prehistoric farming system. As in later centuries the uplands would have provided a source of furze (gorse) and peat for fuel, and bracken for bedding. But their most important role would have been as areas of summer grazing.

The coastal area of West Penwith at Zennor, showing the zone of Prehistoric fields and settlements flanking large areas of Upland Rough Ground.
The fields along the coastal ribbon would have been intensively used for arable cultivation. Hay, to keep livestock through the winter, would probably also have been made in these fields. To secure the crops and hay, most of the grazing animals would have been removed in the summer months to the uplands where the cattle, sheep and goats would graze on the seasonal growth in the rough grasses and heaths.

Some members of the households would have accompanied the livestock onto the uplands for the summer to manage the herds and process the milk; this activity is known as transhumance. On Bodmin Moor small huts (transhumance huts) to house the herdsfolk were built in the shells of earlier roundhouses by later prehistoric farmers, and similar huts doubtless existed in West Penwith. Transhumance would have allowed the farming community to make the fullest use of its seasonally available resources.

Parts of the narrow band of Coastal Rough Ground on the seaward side of the farming heartland were probably used in the same way as the uplands. In places, however, the fields were extended into these coastal margins, maximising the use of the land and suggesting that there were continuing pressures on resources. On the other hand the upper edges of some earlier field systems seem to have been withdrawn from the higher ground. This suggests that the areas of upland rough grazing were extended at the expense of the upper margins of the fields, presumably so that there was a sustainable balance in the farming system between areas of enclosed land and areas of summer grazing.

*Prehistoric fields and lynchets surviving on the cliff edge at Zennor, West Penwith. Photo © Cornwall County Council Historic Environment Service*

The impression one gets when looking at the extent of the prehistoric fields in West Penwith is of a densely populated landscape; a landscape which needed to be carefully organised so that its available resources could meet the demands of the people who lived in it. We know through archaeological investigation, particularly through Cornwall’s National Mapping Programme, that much of lowland Cornwall
was also densely populated. Roughly three thousand enclosures (many of them settlements) from later prehistory have been identified in Cornwall and there are likely to be many more round house settlements as yet undiscovered.

Nonetheless we do not have as clear or as full a picture of the prehistoric landscape as we do in West Penwith because the prehistoric field pattern has not been fossilised and perpetuated in the same way in today’s landscape. The layout of the land in much of lowland Cornwall underwent major reorganisation during the medieval period and the present-day field boundaries have their origins in the enclosure of medieval field systems. The banks of some prehistoric enclosed settlements are fossilised and incorporated into today’s field hedges and some hedges doubtless follow the lines of prehistoric boundaries, but in the main the medieval and subsequent layouts paid little heed to preceding field systems. Where the remains of prehistoric fields have been mapped from aerial photos they are frequently on quite different alignments to the present-day field hedges.

Two prehistoric enclosures are fossilised in today’s fields near Camelford. Contemporary field boundaries have been overlain by hedges enclosing the later medieval field system. Photo © Cornwall County Council Historic Environment Service

The Medieval Landscape
By the end of the Roman period the farming heartland of Cornwall would have been densely populated. Given the number of probable settlements discovered during Cornwall’s National Mapping Programme we think there were more than 100,000 people living in the county. They were housed in settlements set amid a network of small irregular brick-shaped fields.

The period between the collapse of Roman rule in Britain at the beginning of the fifth century and the Norman invasion of 1066 is traditionally known as the Dark Ages. Obviously it was a time of political upheaval and this was accompanied by great social change. During this time rounds and enclosed settlements, with which Cornwall was densely populated during the Roman period, fell out of use. By the time of the Norman invasion the typical settlement was the medieval farming hamlet, consisting of rectangular farmhouses known as longhouses, arranged around a shared farmyard. However few settlements from this period of transition have been excavated and we know little about how this development took place.
In some parts of Cornwall medieval farmers re-used the lines of prehistoric fields; in this way the irregular field layout of later prehistory was perpetuated. This is certainly the case in West Penwith, and in places on the Lizard Peninsula, St Hilary and elsewhere. A good example is the irregular field system at Kestle Merris in St Keverne. Here the present day fields fossilise the medieval pattern; this in turn is based (at least in part) on the prehistoric field layout and the surviving stony banks of prehistoric fields can be seen running into the moorland beyond the edge of today’s fields.

Prehistoric and medieval; fields at Kestle Merris, St Keverne. Photo © Cornwall County Council Historic Environment Service

Over large areas of Cornwall, however, changes in the design and layout of settlements were accompanied by changes in the way the landscape was arranged. There appears to have been a large scale revision of field patterns during the early medieval period, with the establishing of what we call ‘open’ field systems. These changes are closely associated with the way rural society was organised at this time. Settlements were composed of co-operative hamlets (‘towns’) made up of between two and ten households. Each hamlet was surrounded by an area of improved land (sometimes enclosed by an irregular curvilinear boundary) known as the in-ground or townland. Each hamlet and its townland would have been attached to estates or manors and its inhabitants would have been tenants of the estate. The in-ground was divided into long narrow strips and groups of strips were shared equally between each household. In upland areas of Cornwall, particularly on Bodmin Moor, there are surviving examples of abandoned medieval hamlets and their associated fields which provide a clear insight into the character of the medieval landscape.

The in-ground was not permanently under arable or pasture but was worked in rotation. The land would be cropped for two or three years and the ground then sown with grass for use as hay or pasture for a longer period – this is called a ley period and this sort of agricultural system is referred to as ley husbandry. We know that this was being practiced by the eleventh century from records contained in the Domesday Book of 1086. The Domesday texts record the extent of ploughland in Cornwall expressed in terms of land for so many ploughs, and they also record the actual number of ploughs. The number of ploughs is less than the number given for the
ploughland, showing that not all the ploughland was under cultivation at any one time.

Map showing the extent of farmland and rough ground used for seasonal grazing in the medieval period.

There is evidence that medieval agriculture in Cornwall was based on a long ley period with crops grown for two or three years and grass for between four and nine years. The whole cycle would take roughly ten years to complete and the fields were organised into ten cropping units or furlongs which were subdivided into strips. In this way the greater part of the farmed landscape in medieval Cornwall was divided into strips and in most cases this reorganisation of the landscape paid no heed to the previous arrangement of prehistoric fields.

You can imagine what the medieval landscape might have been like by looking at the nationally important field system at Forrabury, above Boscastle. This is one of only five remaining areas of actively farmed open strip cultivation in Britain. The fields cover more than 20 hectares and are formed by more than 40 strips, each bounded by stone and earth ‘balks’.
The open field system on the headland at Forrabury. Inland and running down to the cliffs beyond, the pattern of former open fields is clearly embedded in today’s field layout. Photo © Cornwall County Council Historic Environment Service

From the thirteenth century onwards there were significant changes in the economy, ideology and social customs of medieval society. These included a growing emphasis on private property and increasing awareness of the individual as opposed to the communal. Private inner rooms were built in medieval longhouses and some individual smallholdings were created separate from the rest of the community. The most widespread and far-reaching manifestation of these changes, and one that has left a profound imprint on today’s landscape, was the enclosure of open field systems with substantial boundary hedges.

The gradual enclosure of open strip fields took place mainly between the fourteenth and seventeenth centuries and transformed the landscape into that which survives to this day. The strips surrounding small hamlets were radically re-organised into block-shaped fields based on the enclosure of whole cropping units. These fields are distinctively irregular with very few straight boundaries. This type of field pattern is widespread throughout the county; the landscape around St Anthony in Meneage is a typical example of how the character of today’s landscape is derived from the enclosure of open field cropping units. Where hamlets contained many households landholding arrangements would have been complex and single strips or groups of two or three were enclosed; the resulting pattern closely resembles that of the original open field. Though less common than the larger block-shaped fields there are good examples across Cornwall, such as the fields at Harrowbarrow in the Tamar Valley.
In today’s landscape the Cornish hedges defining these fields are substantial stockproof structures which vary across the county depending on the materials to hand. Granite and slate areas are characterised by stone-faced hedges (and sometimes drystone walls), whereas other areas have earthen banks with quarry ditches along both sides. Most Cornish hedges are covered with mature vegetation, including trees.

Some hamlets survive, but few now contain more than one farming family; many other farms are clearly shrunken hamlets. Networks of winding lanes and roads, all of them hedged and many deeply cut through by centuries of use, connect the farms with each other and with the mills, churchtowns and small villages which made up the fabric of the medieval landscape, and which give much of lowland Cornwall its uniquely ancient character.
Rough Ground in Medieval Cornwall

The use of rough ground for summer grazing formed a fundamental part of the agricultural regime in medieval Cornwall, as it appears to have done in prehistory. At the time of the Domesday Book, in 1086, records suggest that roughly one third of Cornwall was pasture. In the Domesday Book ‘pasture’ refers to land used permanently for grazing and we interpret this as being the rough ground.

Areas of rough ground would have belonged to one or more estates and grazing rights were provided to tenants by the lords of the manors. Medieval farmers would have had rights to an area of rough ground, usually in common with other farmers. Some hamlets had rough ground adjacent to them and this would often be used only by them – these parcels of rough ground are referred to as hamlet commons. Other hamlets had rough ground at some distance away. Here the land was shared between several hamlets. Large areas of rough ground, such as Goonhilly Downs on the Lizard Peninsula, were owned by several manors and grazing rights were granted to all the surrounding hamlets for the use of the whole of the land.

Although much rough ground remained open land, during the later medieval period parts of it were subdivided by the erection of pasture boundaries, either Cornish hedges or drystone walls. Some of these boundaries are ring fences defining the hamlet commons attached to medieval farms. These survive best in today’s landscape in parts of the Lizard Peninsula and in West Penwith.

Livestock were moved to the rough ground in summer partly to take advantage of the seasonal growth of grasses and other herbage, and partly to make it easier to grow crops and hay in the in-ground. In large areas of rough ground, such as Bodmin Moor or Goonhilly Downs, where the grazing areas were some distance from the hamlets, transhumance was practiced. Transhumance is the movement of some members of the household with the animals to the summer grazing grounds.

The landscape at Embla in West Penwith. The patchwork of small irregular fields adjacent to the farm would have been the in-ground or permanently farmed fields. To the left an area of rough ground has been enclosed, probably in the later medieval period, by a curvilinear ring fence boundary. Cornwall County Council Licence 2007. © Geosense 2005
from the medieval period have been found on parts of Bodmin Moor and we think similar structures may have once existed in other areas.

Documentary evidence from other parts of Britain where transhumance was practiced, such as Scotland and northern England, show that it was often teenage girls and unmarried women who accompanied the stock onto the moors; the rest of the family would stay at the settlement to harvest the arable crops. Traditionally the girls would leave around May Day and return at Halloween.

**The Ornamental landscape**

One of the earliest impacts of privatisation on the late medieval landscape was the creation of deer parks by estate owners and lords. Venison was an important commodity in medieval society. It was valued as a prestigious part of the aristocratic diet, important as a special item at banquets, and was often used as a gift to other feudal magnates as a sign of favour. The provision of venison reflected the status and wealth of the provider, as did the ability to entertain important guests with hunting. The management of deer to supply quantities of venison and to provide hunting involved the creation of deer parks. Other forms of entertainment might be enjoyed in the parks such as fishing, boating, and relaxing in viewing areas from where the estate could be seen in its full glory.

Deer parks were large areas of land taken into private ownership and made inaccessible for the majority of the local population. The parks were enclosed by high wooden stake fences known as ‘pales’. Licence to ‘empale’ was granted by the King and was accompanied by strict laws preventing public access. Deer parks were often imposed on former farmland or rough ground which had been previously been available as common grazing land.

By the twelfth century at least twelve castles and manor houses in Cornwall had deer parks attached to them, and almost fifty deer parks are known to have existed in the county by the end of the fifteenth century. Most had been disparked or had become decayed by the mid sixteenth century but their imprint on the landscape can still be traced today. In some cases, such as the park surrounding Restormel castle, the present-day landscape retains a park-like quality with clumps of trees and wooded areas set amid open grassland. In other cases, such as Higher Deer Park at Three Burrows near Truro, the park pale has been fossilised in today’s field pattern by its re-use as field hedges.
Higher Deer Park, near Three Burrows. Field hedges still follow the deer park boundary creating a large oval enclosure which has cut across earlier fields. Photo © Cornwall County Council Historic Environment Service

The Post Medieval Landscape

During the late medieval period, there was an increasing emphasis on private property. This was reflected in the enclosure of open field systems and the division of rough ground which had previously been held in common.

In the post medieval period (from 1540) individual holdings were created separate from the rest of the community and the division of rough ground continued; many crofts – small parcels of rough ground usually held by a single household – date from this period. There was a significant expansion in agriculture, especially during the late nineteenth century, which saw many older farms enlarged and new ones created. The stimulus for this expansion was provided by the demand brought about the growth of industry in the county.

In Cornwall’s Historic Landscape Characterisation the zone characterised by fields derived from the post medieval landscape is referred to as Recently Enclosed Land. The creation of Recently Enclosed Land represented the biggest and most widespread change to the Cornish landscape since the laying out of the medieval open field systems several centuries earlier. Recently Enclosed Land was cut out of former rough ground and the loss of areas of summer grazing was one of the factors leading to the specialisation of agriculture in many parts of Cornwall towards beef and dairy farming by the late nineteenth century.
Historic Landscape Character map showing areas of post medieval enclosure and areas of Rough Ground. Because post medieval farms colonised Rough Ground the map effectively shows the former distribution of Rough Ground in the county.

The Expansion of Agriculture

By the seventeenth century the previously open field systems of the medieval period had been enclosed with Cornish hedges. The medieval communal system had broken down and most farming hamlets had shrunk to just one or two farms. In the new system individual farmers worked their enclosed fields as they saw best.

Likewise the areas of rough ground, which during the medieval period had been unenclosed and held as commons shared by several hamlets, were becoming increasingly privatised and divided into small blocks. Initially this division of rough ground took the form of hamlet commons – the hedging off of land shared by the members of each hamlet. But by the seventeenth century there was further subdivision into ‘crofts’ which were used by individual tenant farmers.

From the eighteenth century onwards agricultural expansion resulted in the creation of new farms and the enlarging of existing ones. There were several phases of expansion with the main one taking place in the nineteenth century. Although some of the earlier post medieval fields are relatively irregular in shape, most are rectilinear with dead straight sides. This enables them to be easily distinguished from fields derived from the medieval or prehistoric pattern.

Other components of the post medieval landscape differ from its precursors. There is generally a greater density of settlements and these are usually single farms or smallholdings rather than farming hamlets. Buildings are often more standardised, relatively small and less well built. Although there are traditional Cornish hedges, there are also many drystone walls in the stonier granite uplands; this particular style of boundary building was prevalent in nineteenth century Cornwall. Finally there is an
intricate network of tracks and lanes most of which follow the straight lines of the fields.

Nineteenth century intake on the margins of former medieval strip fields (in the foreground) is characterised by rectilinear straight-sided fields (in the distance) at Harrowbarrow, Calstock. Photo © Cornwall County Council Historic Environment Service

It is generally accepted that the stimulus for agricultural expansion in the post medieval period came from industrial growth in Cornwall, especially in the nineteenth century. The mining, china clay and quarry workers established small farms in the industrial heartlands, but of more significance was the dramatic increase in the market for agricultural products created by the burgeoning industries.

The fields of the new farms were taken in from rough ground. For centuries this had provided summer grazing for Cornwall’s farmers. The grazing areas of rough ground were usually held as commons but the farmers were only tenants; the land was actually owned by lords of manors and estates. The creation of new farms, whilst greatly increasing the rents obtained by landowners, deprived traditional farmers of a key element of their farming resource. This process must have caused economic and social upheaval throughout the Cornish countryside. Partly as a result of the loss of so much former common grazing land there was a shift in the late nineteenth century towards beef and dairy farming, with former arable fields being put to pasture.

The Tithe Map of the 1840s shows that in the mid nineteenth century mixed agriculture was still being practiced. Each field was cropped for two or three years before being put down to grass for between four and nine years. New farms were laid out for this system with 10 to 15 rectangular fields. Many farms contained small orchards and had access to crofts; these were parcels of rough ground used for summer grazing and as sources of gorse and, in some places, peat for fuel.
The characteristically straight-sided fields of a new farm established on the downs south of St Agnes in the nineteenth century. In the top left can be seen the smaller fields of industrial workers’ smallholdings. Photo © Cornwall County Council Historic Environment Service

**Industrial Smallholdings**

Much of the drive to establish new farms in former rough ground came from the wealth created by the Cornish industries and the increased demand for grain and other agricultural products. Another significant factor, at least in the industrial heartlands, was industrial workers establishing smallholdings.

These were small farms rarely covering more than eight hectares of distinctive small rectangular fields cut out of moorland and rough ground. The scale of eighteenth and nineteenth century colonisation of former rough ground by industrial workers becomes clear when you consider that more than 50,000 hectares of rough ground was enclosed in this way. Tenants often had to build within the first year the dwelling house, stable and barn, and to hedge in the fields which had been laid out by the landlord’s steward.

The dwellings are usually small, low cottages, sometimes under the same roof as the barn and stable. Many smallholdings were sited in exposed and very wet locations with thin acid soils and, as a result, were biased towards pastoral farming. Even so the survival of threshing barns and horse engine platforms (for powering crop-processing machines) at some smallholdings indicate that crops were also grown.
Horticulture
The late nineteenth and early twentieth centuries saw the creation of small distinctive fields associated with horticulture. These are confined mainly to the Tamar valley in east Cornwall and to the far west of the county.

The lower Tamar Valley, with its favourable climate and well drained south facing tributary slopes, was developed as a centre of market gardening from at least the middle of the eighteenth century and possibly much earlier. By the late nineteenth century Botus Fleming and Calstock parishes, with other neighbouring parishes became famous for their cherry orchards as well as producing a variety of other fruits, vegetables and flowers as major exports. Produce from the various farms, orchards and valleys were sent by river transport into Plymouth and beyond, the trade finally ceasing in the 1950s.

South facing cliffs in west Cornwall were also used for horticulture. Here complexes of tiny fields were used to grow early potatoes and a variety of flowers, most notably daffodils. This industry became viable with the coming of the Great Western Railway in 1859 which made the export market accessible.
The Ornamental Landscape
Some medieval Cornish houses had deer parks and small gardens but most deliberately designed landscapes, parks and gardens surrounding large country houses are eighteenth and nineteenth century in origin. Many of Cornwall’s grand houses and parklands were created by the mineral lords – those who owned wealthy tin and copper mines.

Eighteenth century parkland was designed with the great house as its focus; carefully positioned clumps of trees, open vistas and deliberately created ‘natural’ features such as ponds and grottos were laid out. Often the house was positioned so as to obtain the best views of this ornamental landscape. Carriage drives brought residents and visitors along picturesque routes through the landscape. In the nineteenth century the emphasis was more on planting sheltered gardens with exotic specimen tress and shrubs such as rhododendrons and camellias.

Antony House. Photo © Cornwall County Council Historic Environment Service