**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 Crousã 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.

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