

The First Farms

Traditionally the Neolithic period, from six to four thousand years ago, is seen as the time when woodland clearance, increased domestication of animals and the beginnings of crop cultivation gradually led to the adoption of agriculture and the development of permanent settlements. In Cornwall, however, tombs and other ceremonial monuments are the principal archaeological features surviving from this period; there is very little evidence for farms or fields during this time.

From around 1500 BC onwards, during the Middle Bronze Age, farming settlements, rather than tombs, become the predominant features in the landscape. These early settlements consist of groups of houses and other structures usually set amid fields enclosed by earth or stone banks. Archaeologists call these sorts of sites 'open' or 'unenclosed' settlements, distinguishing them from 'enclosed' settlements bounded by a substantial bank and ditch. Open settlements were being built and occupied from the Bronze Age, right through the Iron Age (800 BC – AD 43) and into the Romano-British period.

Round Houses

Much of the evidence for Cornwall's earliest farms comes from the upland landscape; Bodmin Moor, the Lizard Peninsula and West Penwith. In lowland Cornwall traces of prehistoric settlement have been ploughed down and are no longer visible on the ground. But in places on the Cornish moors the abandoned settlements are still there, ravaged only by time.

The ancient farmhouses are circular, built with a stone wall which would have supported a conical timber and thatched roof. In some houses the entrances are simple gaps in the wall; others had tall upright stones for doorways; some entrances were protected from the Cornish weather by a short porch. Round houses, as they are known, remained the standard type of dwelling from the Middle Bronze Age, through the Iron Age and into the Romano-British period; from roughly 1500 BC until AD 400. The houses were grouped in clusters (usually fewer than twenty houses) forming small rural hamlets or villages.



A reconstruction of a prehistoric round house near Chacewater. Photo © Cornwall County Council Historic Environment Service

Round houses were substantial structures, averaging between five and ten metres in diameter, which gives an internal area of between 20 and 80 square metres. Their walls are generally a metre or more wide and often faced on the inside by large upright stones. Archaeologists used to refer to these houses as 'hut circles' but the building of replicas, based on excavation evidence, has led to a truer appreciation of their scale and sophistication.

Round houses usually contained one or more hearths. We do not know whether there were smoke-holes in the roof; some experimental reconstructions show that these can create drafts posing a fire risk to the thatch. Excavations of round houses have revealed information about the way the internal space was organised, such as wooden stakes to make partitions, and wooden supports for benches and beds around the walls.

Round houses in lowland Cornwall were made mainly with wood rather than stone, but the essential design was similar to those in the moorland. This would require the felling of young and mature trees to provide roof supports, and the roof itself would call for large quantities of rushes or turf.

Bronze Age Settlement on Bodmin Moor

In the granite uplands the use of stone in building and remoteness from modern intensive agricultural practice has resulted in the remarkable survival of the early farming landscape. This is especially the case on Bodmin Moor where the remains of roughly 200 Bronze Age settlements have been found. Most appear to have been abandoned around three thousand years ago due to deterioration in the climate at that time.

Archaeological survey of the relict Bronze Age landscape on Bodmin Moor illustrates how early farming was organised. The first fields were small and curvilinear and the field patterns developed piecemeal, with new fields added to existing ones as the settlement expanded. Archaeologists use the term 'accreted' to describe this kind of field system.

The field boundaries consist of low banks of stones and boulders; these fields were designed to be stock-proof. Some fields contain heaps of loose stones which have been cleared from the soil, and at the lower end of some are banks of earth known as 'lynchets' formed by the slippage downhill of soil loosened during cultivation. All of this tells us that crops were cultivated in these fields.

Lanes lead from between the fields to the open moor beyond, which was used as grazing land for livestock. So these early farmers lived in loosely defined hamlets, cultivating the land and growing crops in small irregular-shaped fields, maintaining herds and flocks and sharing communal grazing land with neighbouring settlements.



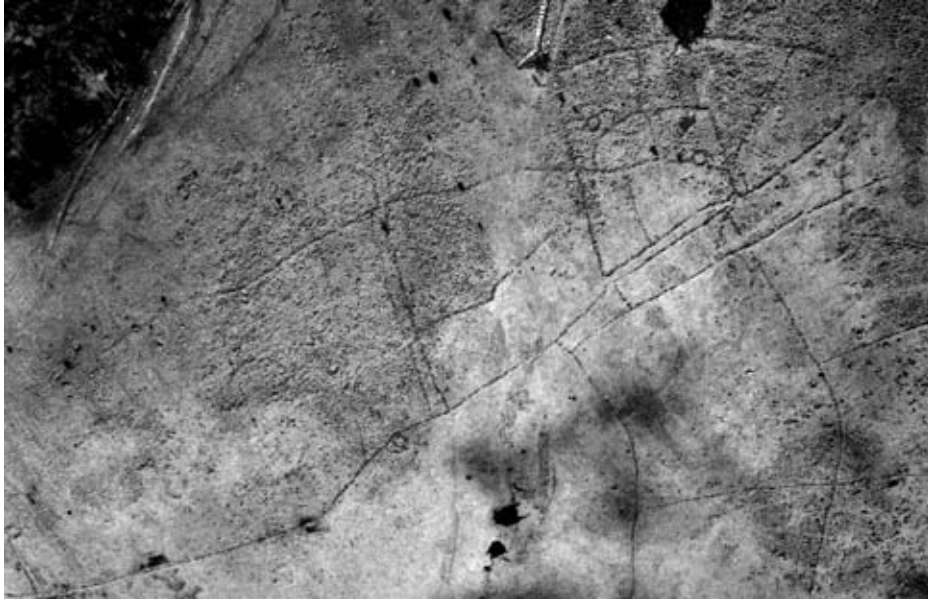
The Bronze Age settlement at Leskernick, Altarnun, is one of the best-preserved examples of an upland farming hamlet with an accreted field system. The settlement developed over a long period of time, with new houses and fields added as the hamlet grew. Photo © Cornwall County Council Historic Environment Service

Reorganising the landscape

On Bodmin Moor settlements with cultivated fields are found mainly around the upland edge whilst the open moorland beyond was used for grazing. Studies of vegetation history suggest that by the Middle Bronze Age much of the heart of the moor was an open landscape – just like today. Maintaining this treeless vegetation cover would have required a very large number of grazing animals.

The need to define and control the use of grazing land led to large-scale reorganisation of the landscape around 1500 BC. Long parallel field boundaries were laid out, ending in boundary banks dividing up the pasture into large blocks. These are known as 'coaxial' field systems. New settlements consisted of groups of round houses scattered throughout the fields, and all of the higher ground beyond the fields was used as common grazing land.

Archaeologists see the establishing of these major land divisions as a response to increased pressure on available resources. Clearly similar pressures were arising throughout Cornwall as traces of coaxial field systems have been recognised in the Lizard Peninsula, West Penwith and elsewhere.



Round houses set amid rectilinear fields at Clitters, North Moor. The long parallel field banks visible below the settlement are part of a Middle Bronze Age coaxial field system. This type of field layout has been recognised in other parts of Cornwall and may have been widespread. Photo © Cornwall County Council Historic Environment Service

Herds and Flocks

Round house settlements in the open parts of Bodmin Moor – the common grazing land - differ from those around its edges. They have no associated fields or just small enclosures. Given their location and lack of fields, these settlements must have had a specialist pastoral function, linked with maintenance of the herds. Some contain substantial well-built houses and were probably permanently occupied, maybe having a co-dependant relationship with the moorland edge communities. Others have small roughly built houses and were probably temporary or summer accommodation for people from the moorland edge taking their cattle and sheep onto the grazing land. These seasonal 'camps' are known as transhumance settlements.



Brockabarrow Common, Bodmin Moor. The round house settlement with a few associated small enclosures rather than a field system is one of a number of

settlements in the heart of Bodmin Moor thought to be based on the herding and maintaining of livestock. Photo © Cornwall County Council Historic Environment Service

Other upland areas

The remains of stone-built round houses and associated fields also survive in West Penwith, on the Lizard Peninsula and on the Isles of Scilly. Whilst the general design of the houses is similar to those on Bodmin Moor, excavations of round house settlements in west Cornwall show a wider date range, extending from the Middle Bronze Age to the Romano-British period.

In West Penwith and the Lizard traces of coaxial field systems testify to the importance here of the division between areas of enclosed cultivated fields and areas of open pasture. Coaxial fields proved an effective system of land division until shortly after 1000 BC when further reorganisation took place.

The land was divided into dense patterns of small, rectangular fields which were intensively cultivated (most have substantial lynchets along their lower sides). These rectangular fields can be clearly seen in West Penwith where controlled access to communal grazing land continued to be an important aspect in the organisation of the farming landscape. Cattle, sheep and goats would have been removed to the nearby upland rough ground or to the cliff tops for summer grazing.



Rectangular fields at Praa Sands, Breage. This type of field pattern (the boundaries are visible as low earthworks in the centre of this photo) is typical of those found in West Penwith and elsewhere dating from the Iron Age and Romano-British periods. Photo © Cornwall County Council Historic Environment Service

The settlements associated with these fields developed as nucleated hamlets rather than widely scattered clusters of houses. Unlike Bodmin Moor most of the prehistoric settlements in West Penwith are part of a landscape which continued to develop through time rather than being abandoned as a relict landscape. For this reason far fewer remains of round house settlements survive here and those that do are less

visible in the landscape. A considerable number were modified in the later Iron Age or Romano-British periods, being enclosed by banks or by being incorporated into courtyard house settlements.



Round houses incorporated into a later courtyard house settlement at Bosulow Trehyllys, West Penwith. Photo © Cornwall County Council Historic Environment Service

Lowland Cornwall

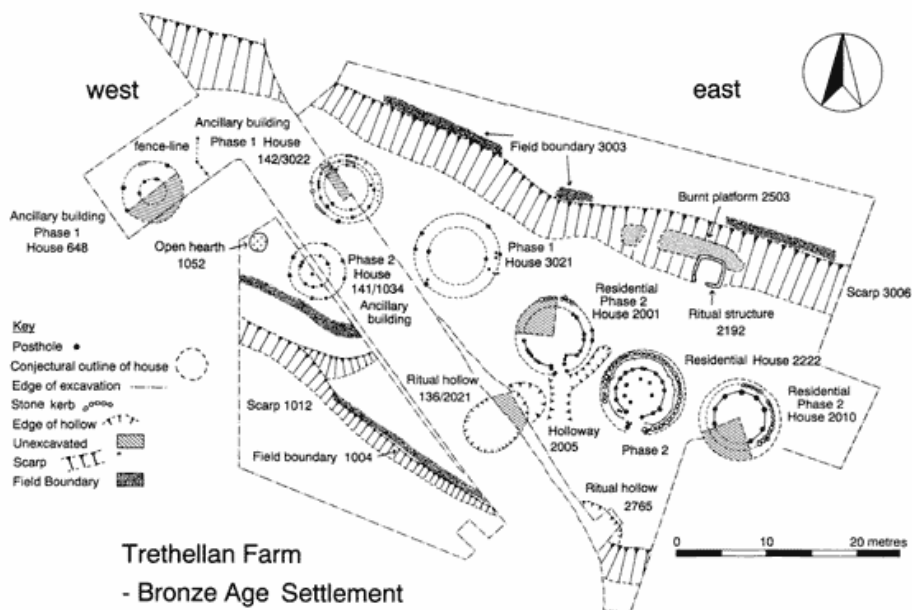
In lowland Cornwall centuries of ploughing have obliterated above-ground traces of prehistoric open settlements. There is no doubt, however, that they were widespread throughout much of the county from the Middle Bronze Age onwards. A small number have been excavated; these cover a range of dates, from Early Bronze Age to Romano-British. These settlements were discovered by chance during building work or other forms of ground-disturbance.

Despite the small number of lowland open settlements currently known, a number of observations can be made about them. Lowland round houses are similar in size to their upland counterparts, although larger examples have been found, and in the Middle Bronze Age are often built within terraced hollows cut into the bedrock.

They are primarily wooden structures built with single or double rings of posts supporting a circle of horizontal beams (ring beams) to which the rafters of the roof would have been tied. The lower end of the rafters would rest on an outer encircling wall. This could be made of stone or wooden hurdles plastered with daub (clay mixed with earth and animal hair or other organic material to form a draught-proof covering). Entrances were frequently facing southeast; some houses had a central post and in the Iron Age some were surrounded by a circular rain gully to keep the interior floor dry.



An excavated round house from the late Iron Age settlement at Higher Besore, Truro. The main feature is a circular gully surrounding the house which was designed to drain rain water from the roof away from the interior of the house. Photo © Cornwall County Council Historic Environment Service



The Middle Bronze Age settlement at Trethellan Farm, Newquay, which was excavated in the 1980s, is a nucleated settlement with a distinctive planned layout. It is built on a terrace levelled into the hillside. The settlement consisted of seven timber built round houses, some with single rings of supporting posts, others with double rings. The remains of associated fields were found above and below the settlement terrace.

The excavations at Trethellan Farm and elsewhere provide a glimpse of life in Cornwall's Bronze Age. Barley and oats were the main cereal crops grown, with smaller amounts of wheat and Celtic bean. Hedge mustard and flax were grown probably for their oil, and wild plants such as hazel nuts and sloes added to the diet. Cattle, sheep, goats and pigs were farmed and the meat diet was supplemented by red deer. In coastal locations, such as on the Isles of Scilly, marine resources were fully exploited; these include shellfish, seals and sea birds as well as fish.

Aerial Photos and Round House Settlements

The below-ground remains of timber round houses in plough-levelled locations consist of post holes (holes in the ground left by the roof-support posts), circular ditches which served as drip gullies, and the shallow cuttings where terraces were dug to form house platforms. Where these features have been cut into bedrock they become pockets of deep, moisture-retaining soil which in periods of dry weather can be visible from the air as cropmarks.

However post holes, which are generally less than a metre in diameter, and drip gullies, which tend to be narrow and shallow, are ephemeral features. They produce recognisable cropmarks only in optimum conditions on well-drained soils. Cropmarks produced by house terraces are vague and ill-defined and are frequently overlooked or mistaken for natural hollows in the bedrock.

For these reasons it is difficult to identify open round house settlements from aerial photos. Nonetheless a number of open settlements were identified during Cornwall's National Mapping Programme. A good example is the coastal settlement at Lellizzick near Padstow, where initial mapping from aerial photos was followed by a programme of geophysical survey which revealed the full extent of the settlement.



Lellizzick, Padstow. Faint cropmarks of round houses are visible in the upper part of this cliff top field. There are further possible round houses spreading down towards the lower left of the photo. Photo © Cornwall County Council Historic Environment Service



Lellizzick, Padstow. Geophysical survey of the same settlement. The outlines (probably the drip gullies) of numerous round houses are identified in this survey. Many of the houses contain internal pits and other features. The fact that some houses clearly overlie others indicates that occupation of the site was long-lived with many phases of abandonment and relocation within the settlement area. Linear ditches are also visible; these are remains of field boundaries laid out on a different alignment to the present-day field pattern. There is more than one phase of field construction and some ditches may be contemporary with the settlement. Data courtesy of English Heritage (Payne 1998)