

# GEOLOGY AND CORNISH HEDGES



**Outline:** Cornwall's hedges and hedging styles vary locally in accordance with the county's mixed geological structure.

## The geological history of Cornwall.

The origin of the stone-built Cornish hedge lies deep in geological history when the great layers of sedimentary rock, formed between 300 and 400 million years ago, were lifted out of the sea during a time of violent earth movement. The layers were buckled and tilted into folds, with volcanic upheavals forcing intrusions of molten magma up into these mountainous heaps from below, slowly to cool when the 'earth storm' finally passed. The once-level sedimentary rocks were now draped over the hardened volcanic peaks, like a gigantically crumpled bedspread. This mountain range, which ultimately became Cornwall, is known to geologists as the Cornubian massif; estimates suggest that the 'bedspread' was a mile thick. Then 250 million years of weathering and erosion began, wearing away the softer sedimentary rock covering and exposing the up-thrust hard igneous intrusions which in cooling had formed the granites. These intrusions are now the chain of granite hills from Dartmoor to the Isles of Scilly, each with its surrounding aureole of metamorphosed rock changed by the intense heat and pressure. Around these lie the remains of the altered sedimentary rock. Cornwall's geological structure shows a series of zones of the three types of rock formation, igneous, metamorphic and sedimentary, with many of their varieties including minerals, ores and many attractive types of stone.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Geology and Hedges in Cornwall](#),  
[http://en.wikipedia.org/wiki/Geology\\_of\\_Cornwall](http://en.wikipedia.org/wiki/Geology_of_Cornwall)  
[encyclopedia.jrank.org](http://encyclopedia.jrank.org) > COR-CRE > [Cornwall](#).)

## Stone in Cornish hedges.

Cornwall's complex geological distribution led to the wide variation in local styles of hedge-building, from the stone hedges of the granite areas to the turf hedges where natural surface stone is scarce. The typical Cornish hedges built of stone with an earth core vary in detail from those built with granite, through metamorphic mine spoil to the herringbone-pattern slate hedges of North Cornwall. These geological differences have an important bearing on the widely-varied ecology and appearance of Cornish hedges.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > Cornish Hedges are Different > [The Cornish Hedge](#); All about Cornish Hedges > [Geology and Hedges in Cornwall](#), [Building Hedges in Cornwall](#), [Wildlife and the Cornish Hedge](#); Picture Gallery > [Geology](#), [Hedge Patterns](#).  
[www.cornish-mining.org.uk](http://www.cornish-mining.org.uk) > [Geology](#))

## Hedge-building and stone resources for the future.

For continuance of local character in Cornwall, hedges must be built or repaired with local stone in keeping with traditional styles of building. This points to retention of existing hedges, recovery and re-use of local hedging stone, and ultimately a new policy of opening small local quarries, strictly limited in their dimensions and operating machinery. These are traditional to the Cornish landscape and when abandoned are, like the hedges built from them, a wonderful haven for wildlife. Old rab pits, where rab (subsoil) was dug out for building hedges, might be re-worked within limits. Quarries still operating near Wadebridge have yielded quantities of shale for building Cornish hedges, but its use in many areas does not blend with the local stone landscape.

([www.cornwall.gov.uk](http://www.cornwall.gov.uk) > living > planning > minerals and waste policy > Minerals Local Plan 1998 > [Appendix 1](#),  
[www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [The Code of Good Practice for Cornish Hedges](#), [Hedges in the Cornish Landscape](#), [Prehistoric](#) [also [Medieval](#), [Post-Medieval](#), and [Modern](#)] Hedges in Cornwall, [Building and Repairing Cornish Stone Stiles](#), [Wildlife and the Cornish Hedge](#).)

**Further reading:** [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Literature Sources](#).

# CORNWALL'S HISTORIC HEDGES



**Outline:** Cornwall's oldest hedges date back around 6000 years. They have a continuous history, with new hedges still being built in the same styles. This anciently-established hedging tradition reflects the changing economic eras of the county and its rich industrial and social history.

## The history of Cornish hedges.

The earliest Cornish hedges enclosed land for cereal crops during the Neolithic age, 4000 - 6000 years ago. Prehistoric farms were about 5 - 10 hectares, with fields of about 0.1 ha for hand cultivation. Many hedges date from the Bronze and Iron ages, 2000 - 4000 years ago, when Cornwall's traditional pattern of landscape became widely established. ([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Prehistoric Hedges in Cornwall.](#) ) Other hedges were built during mediæval field rationalisations, though Cornwall largely escaped the destruction of earlier hedges which happened in the rest of Britain to make way for the manorial open-field system. ([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Mediæval Hedges in Cornwall.](#)) Cornwall was also less affected by the Enclosure Acts and the modern removal of hedges in the production of cheap food. Also unlike other parts of Britain, many Cornish hedges originated in the tin and copper mining booms of the 18th and 19th centuries when many of the heaths and uplands were re-enclosed, creating the small fields typical of miners' smallholdings and using waste rock from the mines to build the hedges. Of the roughly 30,000 miles of hedges still in Cornwall, over three-quarters are anciently-established.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Post-Mediæval Hedges in Cornwall,](#) [Modern Hedges in Cornwall;](#) Picture Gallery > [Historic Hedges.](#))

## Seeing history in a hedge.

Hedges from all these past times are still very visible in the landscape. Their location, position and appearance in the landscape show their antiquity. The older hedges are the crooked ones that snake across the land in bends and kinks where other hedges have been removed, relic evidence of small rounded early fields. The straighter the hedge and more square the field corners generally speaking the more recent they are likely to be. By looking at the pattern of fields on a modern map, hedges can be identified with Bronze Age farms, mediæval burgrave plots, deer parks, mining, transport and other purposes.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [How Old is That Cornish Hedge?,](#) [Unusual Old Features in Cornish Hedges.](#)

[www.historic-cornwall.org.uk](http://www.historic-cornwall.org.uk) > [Flying Past](#))

## Hedges as historical monuments.

Cornish hedges are a rare instance of major prehistoric remains still in everyday use for their original purpose. They give evidence of their status as historical monuments in their siting, shape and size, and pattern of stone cladding. Their structure sits on previous land use, sealing it in the ground and preventing casual interference over the millennia. Hedges contain material which may have archaeological importance. They support vegetation that reveals the earlier nature of the land, or the site of long-vanished human habitation or activity. Some have stone artefacts such as querns, cupstones, granite troughs or early Christian crosses built into their structure.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > Cornish Hedges are Different > [History;](#)

[www.cornwall.gov.uk](http://www.cornwall.gov.uk) > Living > Environment & Waste > Historic Environment > [Historic Environment Information - consulting the HER.](#)

[www.ukagriculture.com](http://www.ukagriculture.com) > countryside > [History.](#) )

**Further reading:** [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Literature Sources.](#)

# THE WILDLIFE OF CORNISH HEDGES



**Outline:** Cornish hedges are naturally very rich in species due to their construction, the shape of the land and the maritime climate. The flail type of hedge trimmer is devastatingly damaging to the biodiversity of the Cornish hedge.

## Cornish hedge habitats.

The Cornish hedge provides everything necessary for the full cycle of the life it supports - earth, stone, crevices damp and dry, shelter, decaying matter and a huge variety of plant life from microscopic fungi to forest trees. According to locality these hedges provide habitats including the characteristics of flower-meadows, woodlands, scrub, field margins, heathland, wetland, rocky outcrops and sea cliffs. Their long continuous history means they are often species-linked to the original pre-farming land. Cornish hedge plants include elements of the original woodland, heathland or other habitat, while the hedge stones host a scree population of mosses and lichens. A single hedge can contain several different basic habitats, and species from those as diverse as marsh and mountain scree can flourish together. A succession of different wild-flowers grows from between the stones, and typically along the top gorse, hawthorn, blackthorn, ivy, honeysuckle and wild rose blossom in their season.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Check-list of Types of Cornish Hedge Flora](#); Picture Gallery > [Cornish Hedge Flora](#).)

## Rich diversity of species.

Cornwall's hedges add up to a wildlife area of roughly 20,000 hectares, and contain around 600 flowering species. Counting these and the woody species, together with grasses, sedges, ferns, mosses and lichens, a mile of healthy traditionally-maintained Cornish hedge should typically contain between two and three hundred easily-visible plant species. These attract vast numbers of insects which in turn bring mammals, birds and reptiles to feed and to set up their homes in the greenery and the stony crevices. The hedge-bank combined with the bushes and trees on top caters for a much greater diversity than the ordinary hedgerow.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Wildlife and the Cornish Hedge](#), [Cornish Hedges in Gardens](#). [www.cornwall.gov.uk](http://www.cornwall.gov.uk) > living > environment and waste > living environment > landscape, trees and plants > hedges > [wildlife in Cornish hedges](#); Picture Gallery > [Wildlife](#). [www.wildlifextra.com](http://www.wildlifextra.com) > wildlife news > Archive > November 2007 > [The importance of hedges for wildlife](#)

## Maintaining the hedge wildlife.

Building, repairing and trimming the Cornish hedge so it keeps its healthy condition are skills on which the wildlife depends. These versatile and beautiful hedges need traditional construction and care so that they continue to be a haven of life. Much damage has been done to their structure and biodiversity by heavy trimming with flails, which has decimated invertebrate life, prevented wild flowers seeding and caused ivy and rough weeds to take over the hedge-bank. In many hedges over two-thirds of the species have been eliminated by the flail-mower since 1970. In some, overtaken by flail-induced rampant weeds such as winter heliotrope and Irish ivy, hardly any of the original native species are left. Trimming in late winter with a finger-bar cutter, alternate sides of the hedge in different years, best safeguards the plant and animal life.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Wildlife and the Cornish Hedge](#), [The Life and Death of a Flaied Cornish Hedge](#), [Caring for Hedges in Cornwall](#); Picture Gallery > Cornish Hedge Flora > [Flaied Hedge](#). [www.cornwall.gov.uk](http://www.cornwall.gov.uk) > living > environment and waste > living environment > landscape, trees and plants > hedges > field hedge management > [Recommended Practice](#).)

**Further reading:** [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Literature Sources](#).



# TYPES OF HEDGE IN CORNWALL



**Outline:** There are three main types of hedge in Cornwall, according to their construction. Among these three types are a wide variation of styles and patterns, especially with regard to the Cornish hedge.

## Cornish hedges are different.

Hedges in Cornwall are always called 'hedges', never 'hedgerows' or 'walls'. The typical **Cornish hedge** is of stone construction with an earth core, forming a hedgebank as wide at the base as it is high. Natural vegetation grows between the stones, and usually there are bushes or trees growing naturally along the top. ([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Geology and Hedges in Cornwall](#), [Building Hedges in Cornwall](#), [Wildlife and the Cornish Hedge](#).) On the higher hills where there is plenty of stone at or near the surface, **stone hedges** are built using the natural 'moorstone' rocks and boulders cleared to make way for fields. Stone hedges are constructed very differently from dry-stone walls. ([www.dswa.org.uk](http://www.dswa.org.uk)) Tombstone hedges consist of a row of large flat boulders set on edge. In the eastern part of Cornwall stone may be scarce, and here are many **turf hedges** where the earth hedge-bank is clad with turfs instead of stone and grown over with grasses and herbaceous plants, usually with bushes or trees along the top.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Building Hedges in Cornwall](#), [How Old is That Cornish Hedge?](#); Cornish Hedges are Different > [The Cornish Hedge](#); Picture Gallery > [Cornish Hedges](#).)

## Local styles of hedge-building.

The style of a traditional Cornish or stone hedge depends on two main factors: the type and amount of stone available, usually that found locally, and the craftsman who built it. Not only will a hedge in, for instance, West Cornwall (granite) differ radically from a hedge in North Cornwall (slate), though both built on the basic Cornish hedge principle, but each can differ from those in their neighbouring fields. This is due to local geological changes, often very sudden, and to the landowner's whim or the difference in the hedger's personal handling of the stone.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Geology and Hedges in Cornwall](#), [Repairing Cornish, Stone and Turf Hedges](#); Picture Gallery > [Hedge Patterns](#).)

## The importance of maintaining traditional styles.

The hedges in Cornwall are a large part of the richly diverse and beautiful landscape which is of such high value to tourism. In many areas the natural stone is exposed, as on the granite-strewn hilltops and the rugged sea-cliffs, and here the local stone used in the hedges forms a characteristic landscape in sympathy with these rocky outcrops and with the local stone used in building the older houses in the area. An important reason for maintaining the traditional hedges is that their solid hedge-bank makes an efficient bulwark against run-off, defending the land lower down from flooding.

( [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > [The Guild of Cornish Hedgers](#); All About Cornish Hedges > [Geology and Hedges in Cornwall](#), [Hedges in the Cornish Landscape](#); Cornish Hedges are Different > [Uses](#), [The Future](#)).

**Further reading:** [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Literature Sources](#).

# TREES IN CORNWALL'S HEDGES



**Outline:** The windswept maritime situation of Cornwall and the pattern of agriculture mean that without the hedges there would be few trees across the major part of the county's landscape.

## History of trees in Cornwall.

Historically the timber (maiden, or uncut, trees) and wood (coppiced trees) from Cornwall's hedges have been an important resource. By the end of the Bronze age the county was poor in trees, due to the great demand for industrial purposes, principally charcoal for tin-smelting and bark for leather tanning. By mediæval times the hedges were the main source of wood for domestic use, and later were often an important item in tenancy agreements. Today trees in hedges no longer have a trade value, but are highly esteemed for their landscape value for tourism, the shelter they give to livestock, crops and people, and for their value for wildlife.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Trees on Hedges in Cornwall](#); Picture Gallery > [Trees in Cornish Hedges](#).)

[www.cornwall.gov.uk](http://www.cornwall.gov.uk) > living > environment and waste > living environment > landscape, trees and plants > trees and woodland > [Ancient Trees in Cornwall](#), [Elms in Cornwall](#).)

## Care of trees in Cornish hedges.

The climate of Cornwall and the structure of the hedge combined mean that trees growing on the hedge may need a special kind of maintenance. Traditionally they were coppiced to provide wood, but also to preserve the hedge structure. An over-mature tree in falling will destroy a section of the hedge-bank and call for expensive repairs. Coppicing also improves the shelter value of the hedge against Atlantic gales, and for broad-leaved trees greatly extends their life especially in the more exposed parts of the county. The trees are coppiced selectively, each trunk being cut down when it is, traditionally, as thick as a man's thigh at breast height, and then allowed to regrow. Hedges should be trimmed leaving a strip along the middle of the top to grow up naturally into trees. This helps elm suckers, surviving after Dutch elm disease, to regrow.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Caring for Hedges in Cornwall](#), [Cornish Hedges in Gardens](#).)

## A modern problem.

Many people now plant trees along their hedges for amenity, a trend which, although thought to be good for conservation, often is not so, especially if planted too close to the hedge. Many of the trees used are of foreign origin and do not suit the Cornish landscape, climate or wildlife. Often trees are planted all over land that is more valuable for wildlife in its present state than it will be when the trees have grown. Nice little wet meadows full of interesting mosses, flowers and grasses, or mine waste with its specialised flora and fauna, disappear beneath alien silver-leaved poplars or Italian alder. Tree-planting is fine but must take into account what grows there naturally already and what the end result will be, both visually and for wildlife. The new trees should never be planted close together, as is usually done, often acting on poor advice. This is bad for wildlife and bad for the trees themselves. Too many trees, especially conifers, along a hedge will shade it heavily and the diverse natural flora soon disappears under a pall of ivy or fallen pine needles. A better plan is to plant only native trees (such as oak, ash, elm, holly and hawthorn) at about 4 metres from the hedge, forming in effect a woodland ride beloved of wildlife and leaving room for proper maintenance of the hedge. If trees, excepting thorns, are to be planted on top of a new hedge, the top and bottom widths of the hedge must each be increased by one metre.

([www.btcv.org.uk](http://www.btcv.org.uk) > shop > books > BTCV handbooks > [tree-planting and after-care](#).)

**Further reading:** [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Literature Sources](#).

# UNUSUAL FEATURES OF CORNISH HEDGES



**Outline:** The Cornish countryside is rich in man-made features, giving much pleasure to those who notice them, perhaps casually in passing, or in having a special interest.. Many of these features are incorporated in or associated with Cornish hedges.

## Variety of unusual features.

Most of the historic features contained in hedges were crafted in the same local stone. These include housing for springs, spouts, troughs and wells, pigs' crows (sties), bee-boles and hulls (a cave built into the hedge to keep butter and milk cool), sheep-creeps and hare-holes. Others, such as Celtic crosses, have been added to the hedge. These have even been used as gateposts, buried head down. Then there are features formed by the hedges themselves when built for a special purpose, such as safety hedging around the mouth of disused mineshafts, pounds for corralling strayed animals, deer-park hedges, leats, tide-mills and quays. The old Cornish word for 'hedge' is 'kea', and the old quays for Cornish harbours were built on much the same principle as a stone hedge. Other hedges are of interest in their historical context, for example those which were built by prisoners-of-war or unemployed miners, or were used for concealment by smugglers or Civil War soldiers.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Unusual Old Features in Cornish Hedges](#); Picture Gallery > [Features](#).  
[www.oliverscornwall.co.uk](http://www.oliverscornwall.co.uk) > Cornwall Reviews Index > Miscellanea > [Cornish crosses](#), [Cornish stiles](#).)

## Prehistoric artifacts.

Ancient stone items have been built into many Cornish hedges, usually unknowingly but occasionally either to conceal them or to display them. The stone trough or grindstone is no longer an item for daily use but an interesting 'bygone' to be shown off in the new hedge around the 'barn conversion'. Unfortunately, setting such an item on its edge in the hedge's face is likely to weaken the structure. In the past such items, usually broken, would be used as an ordinary piece of stone during the building of the hedge, and may be indistinguishable to outward view. Prehistoric artefacts such as querns (the hollowed-out saddle-shaped stones on which grain was ground by hand), cup-stones, loom-weights and hand-axes have been found in Cornish hedges, usually when the hedge has been demolished, repaired or re-built. These will most likely have been ploughed out of the field and added unrecognised to the pile of clearance stone for building hedges. The great flat boulders once used to cap cromlechs (burial chambers), or for lintels of wells, courtyard houses or fogous, also turn up in hedges, set up on edge as part of a 'tombstone' type of hedge or simply laid on top of the hedge or leaned against it as they have been cleared from the field in the past. The long menhir or standing stone may be found in many a Cornish hedge, incorporated into the hedge after being removed from the field, sometimes now masquerading as a gatepost or perhaps used to raise a stile and make it more stock-proof.

[www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Prehistoric Hedges in Cornwall](#), [Unusual Old Features in Cornish Hedges](#).  
[www.historic-cornwall.org.uk](http://www.historic-cornwall.org.uk)

## Stiles and gates.

Cornwall's characteristic stone stiles and gateposts are a fascinating heritage, with no two exactly alike. There are three main types of stile: the cattle stile, the sheep stile and the coffin stile, with variations on each kind. The coffin stile was so-named not because of the ease with which a coffin might be carried over it, but after the old Cornish word for a hole in the ground, as there is an excavation below the treads rather like a modern cattle grid. Gateposts often display the drill-hole marks showing the old method of splitting the stone. Many of the attractive old wrought iron field gates still in use date back to the 19 century.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > AllAbout Cornish Hedges > [Building and Repairing Cornish Stone Stiles](#); Picture Gallery > [Cornish Stiles](#), [Gates and Gateways](#).)

**Further reading:** [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Literature Sources](#).



# GOVERNMENT POLICY TOWARDS FARM HEDGES



**Outline:** Control of farming matters by Defra is increasingly being dictated from Brussels. The change in farming subsidies towards environmental schemes means that some grant aid is available for some Cornish hedges.

## Common Agricultural Policy (CAP)

The scenario, or more accurately running skirmishes, between the government and farmers changes all the time. Roughly, the *Common Agricultural Policy (CAP)* is decided in Brussels, and its rules are applied to a greater or lesser extent by each member country. Since the war, British farmers have received different payments depending on where they farmed, what and how much they produced, and what they wanted to spend money on their farm. In the current CAP reorganisation of farm subsidies, these have been resolved into the *Single Farm Payment* whereby each farmer gets an annual payment based partly on the money he had been receiving, and partly on the size of his farm. The farmer must keep all his land in Good Agricultural and Environmental Condition (GAEC). The *GAEC* rules are listed in the Defra *Cross-Compliance Handbook* (52 pages). Most of them affect the daily work of farmers, an example being the banning of hedge trimming (with few exceptions) during March to July. In 2006/7 ten more sets of compulsory regulations are being brought in.

## Voluntary environmental schemes.

The main voluntary scheme is *Environmental Stewardship* (which now includes the *Environmentally Sensitive Area Scheme* and the *Countryside Stewardship Scheme*). Its official aims are:- Conserve wildlife (biodiversity) - Maintain and enhance landscape quality and character - Protect the historic environment and natural resources - Promote public access and understanding of the countryside - Natural resource protection (including genetic conservation and flood management). It is in three sections: the *Entry Level Scheme (ELS)*, the *Organic Entry Level Scheme (OELS)* and the *Higher Level Scheme (HLS)*. The ELS looks at “some of the environmental issues affecting the wider countryside” and gives £30 per hectare annually for “selected land management options linked with specific environmental features”. The OELS is largely the same as the ELS but gives £60 per hectare for registered organic land, which is more expensive to farm. The HLS gives money for “more significant benefits in high priority situations and areas”. Agreements under the ELS and OELS are for 5 years and for the HLS 10 years with a 5-year break clause. Broadly, the ELS is for maintaining what is already there; eg. the repair of gaps in Cornish hedges. No eligible farmer is refused for the ELS. The HLS is for doing new or restoring targeted high priority environmental items; eg. The building of new Cornish hedges. Funds for the HLS are limited and only the better schemes are being accepted.

In the West Penwith ESA, about 260 farmers get £85 per hectare annually for carrying on traditional farming methods including keeping all their stock-proof hedges in good repair, a very expensive item these days. The fact that the field patterns between St Ives and St Just look now the same as they did 20 years ago is a tribute to the scheme.

## Problems.

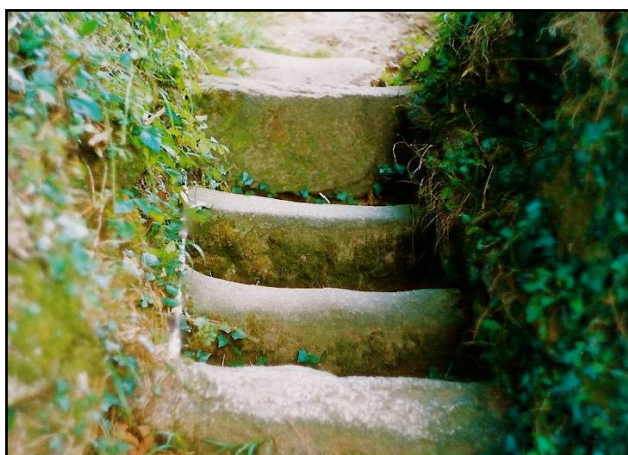
The problem of applying schemes and regulations across Britain is that they have to apply the same to every situation, eg for a 2 ha field on Bodmin moor and a 200 ha field in East Anglia. This results in enormous quantities of paperwork eg the ELS instructions and application form is 112 pages long. Furthermore the rules are constantly being changed by Defra in the light of experience.

Until supermarkets arrived, the food produced by farmers was sold through markets to wholesalers who supplied the small shops in every town. The markets acted for the farmer and usually there were enough wholesalers to prevent their getting together to fix the prices, which varied day by day according to supply and demand. Nowadays the buying power is in the hands of five supermarkets. Because competition is ferocious and food is cheaply imported from other countries, they pay the farmers as little as they can, calculating their prices based on the farmers getting all the Defra grants that they are entitled to. The smaller or less-efficient farmers have to sell to the supermarkets at a loss as there is nowhere else to sell except for a tiny number of farmers' markets and local shops. This means that many small family farms are having to close down because the prices they get are not enough to live on.

([www.ukagriculture.com](http://www.ukagriculture.com)) > [farming today](#)

NOTE: Words in italics are areas to be visited at [www.defra.gov.uk](http://www.defra.gov.uk) > [Home](#) [search]

# ACCESS TO THE CORNISH COUNTRYSIDE



**Outline:** Hedges are the most prominent and widespread feature of Cornwall's landscape, history and wildlife. The Cornish countryside is voted by visitors to be their most important attraction within the county.

## Landscape, history and wildlife.

One quarter of Cornwall's income is from tourism, much of it from people visiting the twelve Areas of Outstanding Natural Beauty ([www.cornwall-aonb.gov.uk](http://www.cornwall-aonb.gov.uk)). The principal feature in the countryside is the network of Cornish hedges, with their flowery banks, wind-sculpted bushes and mossy stones. These hedges are seen from the main A30 trunk road as well as the secondary roads and the multitude of winding country lanes. Away from the motorcar, there are 2,500 miles of public footpaths and bridleways, most of them bounded, at least on one side, by Cornish hedges. There are over 20,000 hectares of open access land. This is a new right of walking across private land. The rules for this are, in detail, complicated but are unlikely to annoy the ordinary member of the public seeking a walk in the countryside. ([www.ramblers.org.uk](http://www.ramblers.org.uk) > Our Work > [Freedom to Roam](#), [www.cornwall.gov.uk](http://www.cornwall.gov.uk) > living > environment and waste > living environment > [Access to Open Country](#), [www.defra.gov.uk](http://www.defra.gov.uk) > Wildlife and Countryside > Access to Countryside [Access to Open Countryside \(CROW\)](#), [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > Cornish Hedges are Different > [Landscape](#).) The character of the Cornish countryside starts in geological history with the eruption of the molten granite and the erosion of the sedimentary rocks, giving a rugged scenery. In recent history two thousand years of tin and copper mining have left their own fascinating relics, some of the deeply mined stone being used in field hedges. Some of these areas are now World Heritage Sites. ([www.cornish-mining.org.uk](http://www.cornish-mining.org.uk)) Other picturesque hedges date from the Neolithic age, as old as Stonehenge, with a continuous story of field boundary changes right up to the present day. Most of this can only be seen close to by walking the countryside. ([www.oliverscornwall.co.uk](http://www.oliverscornwall.co.uk) > Cornwall Reviews Index > [Coast and Countryside](#), [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Unusual Old Features in Cornish Hedges](#), [How Old is That Cornish Hedge?](#); [Picture Gallery](#)) Apart from 1800 hectares of designated nature reserve, wildlife can be seen close at hand by walking the footpaths and across open-access land. Most footpaths run alongside Cornish hedges, giving ample opportunity to see the wildlife. Cornwall's 30,000 miles of hedges add up to around 20,000 hectares of varying habitat. ([www.cornwall.org.uk](http://www.cornwall.org.uk) > living > environment and waste > living environment > landscape trees, plants > hedges > [Wildlife in Cornish Hedges](#).)

## Keeping roads and paths open

Away from upland and coastal areas the highway hedges grow luxuriantly and need trimming to allow for wheeled and foot traffic. The County Council leaflet on roadside hedges gives recommendations that seek to balance the need for highway safety with the conservation of wildlife. ([www.cornwall.gov.uk](http://www.cornwall.gov.uk) > living > environment and waste > living environment > landscape trees and plants > hedges > [Highway Hedge Management](#).) The burden of trimming bridleways and footpaths is divided between the landowner and the highways authority, and is the cause of many complaints by users. Walkers should wear suitable clothing. Carrying a pair of secateurs can assist the pleasure of the walk. ([www.ramblers.org.uk](http://www.ramblers.org.uk) > [our work] [Footpaths work](#))

## Stiles

Much of the fascination of footpaths in Cornwall lies in the many and varied stone stiles. Due to a mistaken belief that they contravene health and safety rules, some landowners are replacing them with wooden stiles which are actually less safe, as well as being non-traditional. Less-able people physically find the old stone stiles, built when everybody had to walk and rheumatism was rife, much easier to manage than wooden stiles. Those stone stiles which are thought not to be stock-proof can easily be rebuilt to keep in modern breeds of cattle and sheep.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Building and Repairing Cornish Stone Stiles](#).)

**Further reading:** [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Literature Sources](#).



# THE HEDGE (&WALL) IMPORTANCE TEST



**Outline:** The Hedge (& Wall) Importance Test (HIT) is a response to the need for a simple, economical and non-invasive method of assessing hedges, hedgerows and walls on a national basis. It is available free from [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > [The Hedge \(& Wall\) Importance Test](#).

## The HIT method.

The survey form containing 24 simple questions produces the HIT mark for the overall importance of the hedge on a scale of 1 to 10. The computer also automatically provides separate HIT marks for the three principal values of history, landscape and wildlife, and a detailed description of the hedge. The scoring system takes into account 15 main factors and over 60 sub-factors, and is equally divided between history, landscape and wildlife. The test can be applied at any season of the year, anywhere in Britain, to any kind of hedge, hedgerow or wall, and requires no special knowledge. It is non-invasive to the wildlife, and is carried out simply by walking the length of the hedge and answering the questions. This simplicity contrasts favourably with other hedge-surveying methods which are not always friendly to wildlife and may not produce usefully comparative data.

([www.defra.gov.uk](http://www.defra.gov.uk) > farming > environmental management > landscape features > hedgerows > [hedgerow-survey-handbook](#))

## How to use the HIT.

Read the introduction, then print out the survey form and help-note. It is very important to take the help-note with you to the hedge, and read the note for each question as you answer it. Back at the computer, enter your answers to obtain the HIT marks and printed description of the hedge. Using the help-note to answer the questions fully and correctly ensures that the description will be accurate. You can also use the Search and Analyse facility to view other HITs or analyse different aspects of the data stored in the HIT database. For students without access to the internet a manual version is provided, but this will only give the overall HIT mark.

## The purpose and uses of the HIT.

Hedge surveys are required for various reasons and need to be carried out cost-effectively and without interference to wildlife. The HIT was designed to provide this service for all types of hedge and wall, pin-pointing those worth further survey by an expert, to facilitate schemes such as the Biodiversity Action Plan, and assist in assessments for environmental schemes of all kinds. The HIT is also of use in assessing hedges involved in planning applications. It is intended for use by the general public, for instance the person who wishes to object to a hedge's removal. It is of interest to the wildlife or history enthusiast and the landscape architect. Anyone who owns a Cornish hedge, perhaps around their garden, can find out how it rates for importance, and, if not highly, how it may be improved.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Cornish Hedges in Gardens](#).  
[www.rspb.org.uk](http://www.rspb.org.uk) > our work > conservation > advice > legal issues > hedgerows > [hedgerow regulations 1997](#))

**Further reading:** [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Literature Sources](#).

# THE CARE OF CORNISH, STONE AND TURF HEDGES



**Outline:** The structures of the Cornish hedge, the stone hedge and the turf hedge require a special kind of maintenance. This includes repair of gaps in the stonework or hedge-bank, fencing to protect the hedge from damage, trimming the scrub growth on the sides of the hedge and coppicing trees or bushes growing on the top.

## Why hedges need repair.

Many ancient hedges have stood for thousands of years with little change, while badly-built modern hedges require frequent repair or even rebuilding after a few years. A good Cornish hedger can guarantee his work against needing repair for a hundred years, barring inflicted damage. Hedges suffer from the effects of wind, rain, tree roots, burrowing rabbits, farm animals, vehicle impact, inappropriate trimming, careless people and general neglect. Eventually the hedge sides lose their batter, bulge outwards and stones fall. If minor repairs are neglected, the hedge can quite soon become ruinous and in danger of removal.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > Cornish Hedges are Different > [The Cornish Hedge](#), [Uses](#), [The Future](#).)

## Practical repairs.

Repairing hedges, as with building them, is a skilled job. As far as possible the existing stones, earth and turf should be re-used, new stone should be of the same type, and the style of building matched to that of the original hedger. In traditional Cornish hedges the stones have to be laid so as to interlock, as the batter settles, with the original courses of stone. Today, with lack of time and funds, gaps are often filled with a pile of stones or some rough fencing, but the stones at the sides of the gap will continue to fall if the hedge is not properly repaired. Turf hedges are usually repaired using a tractor digger or bucket. This is better than no repair at all, but is not as good as the old way of building up the gap using diamond-shaped tobs (turfs) dug and placed on to the hedge with the long-handled Cornish shovel.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Repairing Cornish, Stone and Turf Hedges](#), [Building and Repairing Cornish Stone Stiles](#).)

## Maintenance and prevention.

The old practice of 'casting up', digging out the soil at the foot of the hedge every few years and throwing it up on top of the hedge-bank, binds the stones and restores the vegetation. Bushes and trees on the hedge-top need to be selectively coppiced to reduce wind-rock, which loosens the stones, and to prevent the serious damage caused to the hedge-bank if a tree falls. Fencing the hedge more than halves the need for repair in fields used for livestock. Vigilance in replacing any stone which is dislodged, and control of rabbits, are also important. The best preventive of future expense in repairs is a well-built hedge.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [The Code of Good Practice for Cornish Hedges](#), [Caring for Hedges in Cornwall](#), [Building Hedges in Cornwall](#), [The Curse of Rabbits in Cornish Hedges](#), [Roadside Hedges and Verges in Cornwall](#), [Cornish Hedges in Gardens](#).)

[www.cornwall.gov.uk](http://www.cornwall.gov.uk) > living > environment and waste > living environment > landscape, trees and plants > hedges > field hedge management > [Recommended Practice](#).)

**Further reading:** [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Literature Sources](#).

# BUILDING HEDGES IN CORNWALL



**Outline:** Since the Neolithic Age hedges have been built in Cornwall using stone, earth and turf, the craft unchanging through time. Today, with many of the hedgers who were taught the traditional way reaching retirement, there is a need for properly trained young hedgers.

## Structure of the Cornish hedge.

The Cornish hedge is built of stone with an earth core. Small rab pits can still be seen where the 'rab', or clay-shale subsoil, has been dug out for use as hedging fill. As each course of stone is added on each side of the hedge, the fill is packed in between and rammed hard. The largest stones, or 'grounders', are laid first, then any gaps between their tops are levelled up with a 'filler' course of stone (called so because it fills these gaps). The next largest size of stone is then laid as a level course, and so on with the courses diminishing in size until the smallest stone is used for the top row. The 'grounders' are slanted inwards and each course laid so that the hedge side has an inwardly-curving 'batter', like the sides of a lighthouse. The width of the hedge's base is the same as its height, and the top of the hedge is half the width of the base. A stone hedge is made in roughly the same way, only with stone used for the fill instead of earth, or else is a single row of boulders or large stones. A turf hedge is similarly built, but using thick, heavy diamond-shaped 'tobs' (turfs) in place of stones. If trees, excepting thorns, are to be planted on the hedge, it is built one metre wider.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Building Hedges in Cornwall](#), [Building and Repairing Cornish Stone Stiles](#).)

## The craft of Cornish hedging in danger.

Building new hedges, and repairing existing ones, is a skilled craft. Skilled hedgers in Cornwall can be relied on to do a proper job, but many are nearing retirement age. There are others who lack correct training and are under pressure to do sub-standard work. A cheap job is requested, few jobs are properly specified, and when they are the specification itself is usually faulty. Tractor shovels, while making the work a lot easier, are often misused in the interests of a quick job. Supervision of completed work is poor, perhaps due to wilful ignorance. Contract gangs find difficulty in training new recruits satisfactorily while the job is being done. The result is that many new hedges are poorly built, storing up expensive trouble as they begin to fall down in the relatively near future - sometimes even within a year. A good hedger can guarantee his work for a hundred years, barring inflicted damage.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > [The Code of Good Practice for Cornish Hedges](#).)

## Apprentice training scheme.

In response to these problems of looking after the countryside, the Guild of Cornish Hedgers was founded in 2002 with the aim of putting into practice the traditional methods gleaned from a consensus of experienced hedgers, and providing correct specifications for building hedges. An apprentice training scheme is in progress (2009-10) with funding for 40 places from the Heritage Lottery Fund bursaries, match-funded by the Guild, giving a sixty working-day training period. The Guild promotes access to the Cornish Hedges Library which addresses the previous lack of written instruction and lore on all aspects of Cornish hedges.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > The Guild of Cornish Hedgers, [Learning to be a Hedger](#), [All about Cornish Hedges](#))

**Further reading:** [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Literature Sources](#).



# WHO OWNS THAT CORNISH HEDGE?



**Outline:** The appearance of the Cornish countryside is made or marred by the people who either own or are responsible for the field and roadside hedges. The ownership of a Cornish hedge is often neither clear nor certain.

## Points of law on boundary hedges.

At law, a hedgerow is said to have no legal width but a Cornish, stone or turf hedge does. A boundary might be along the centre of the hedge, or along one side or the other at the base or the hedge. Where there is a hedge and ditch there may be complications: ([www.boundary-problems.co.uk](http://www.boundary-problems.co.uk)) Generally, the owner of the hedge has to keep it stockproof, especially where it adjoins the highway. Both sides of a boundary hedge may belong to a single owner who has the right to go on to his neighbour's land to maintain the other side of the hedge, while the neighbour can force the hedge owner to trim his side and take the trimmings away. If trees grow on the hedge, the question of ownership applies to their lopping, coppicing or felling. ([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Caring for Hedges in Cornwall](#).) With a jointly-owned Cornish hedge, each neighbour has a right of support for his half of the hedge along the centre line. ([www.communities.gov.uk](http://www.communities.gov.uk) > [Search] party walls > [Party Wall etc Act 1996: explanatory booklet](#).) In a dispute, the joint appointment of a chartered surveyor to decide the issue may be advisable, as the position of a boundary cannot be assumed. Roadside hedges, however, are assumed, in the absence of other information, to belong to the adjoining landowner, and are subject to the needs of the highway. Trimming the roadside hedge and verge is usually the responsibility of the owner, with the highways authority chasing him if growth from his hedge causes a serious traffic hazard. Sometimes in the past land was sold retaining the verge, so development could be controlled by denying access across this 'ransom strip'.

([www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Who Owns That Cornish Hedge?](#), [Cornish Hedges in Gardens, Roadside Hedges and Verges in Cornwall](#).)

## The Land Registry.

The Land Registry has a helpful guide on boundary questions at [www.landregistry.gov.uk](http://www.landregistry.gov.uk) > Forms & Publications > public guides > [PG019 Title plans and boundaries](#).

## Surveying hedges.

This brings in a range of aspects: the legal position, physical features of structure and wildlife, historical evidence, geographical location and community involvements past and present. The obligations of ownership are often buried in the past, perhaps centuries ago, and require research, starting with the local records office. Much can be learned from maps, old registers and title deeds. Dating hedges cannot be done by simply counting woody species, as a popular fallacy suggests. A Cornish hedge might have stood for thousands of years, and the style of building has remained the same. Age can be deduced from various features but an archaeologist may need to excavate the hedge before it can be confirmed.

([www.rspb.org.uk](http://www.rspb.org.uk) > our work > conservation > advice > legal issues > hedgerows > [hedgerow regulations 1997](#), [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > [The Hedge \(& Wall\) Importance Test](#); All About Cornish Hedges > [How Old is That Cornish Hedge?](#), [Prehistoric](#) [also [Mediaeval](#), [Post-Mediaeval](#), [Modern](#)] Hedges in Cornwall, [Wildlife and the Cornish Hedge](#), [Trees on Hedges in Cornwall](#).)

[www.cornwall.gov.uk](http://www.cornwall.gov.uk) > living > environment and waste > [Historic Environment](#))

**Further reading:** [www.cornishhedges.co.uk](http://www.cornishhedges.co.uk) > All About Cornish Hedges > [Literature Sources](#).