HOW OLD IS THAT CORNISH HEDGE ?

Research sources, maps and other papers / relative dating principles / physical relationships / functional relationships / systematic relationships / hedging pattern / state of repair / common types of hedge in Cornwall / what to do next / prehistoric hedges / stitches / mining upheaval / the historic hedged landscape by map reading and interpretation.

Many efforts at recording hedges are unsuccessful because of small numbers, as a selection has been made instead of a statistically useful sample, and because of the variety of hedge characteristics. Surveys have been made without any definition of the aims of the survey or exactly what was to be done with its results and conclusions. Not only is there a need for data relating to the construction of hedges, but other factors relating to wildlife, history and situation in the landscape are needed. The Hedge (& Wall) Importance Test (available on this website) was developed in response to this general need, not only for Cornwall but for the rest of Britain. It gives a procedure for ranking individual hedges in terms of marks-out-of-ten for their importance, taking into account 15 main factors and over 60 sub-factors within the 24 simple, factual questions, and producing standard comparable data with an all-round description of the hedge.

Prehistoric stone hedge rebuilt by miners in the 19th century. Visual evidence of rebuilding is that the many kinks left in early hedges where others originally enclosing the tiny fields were removed have here been smoothed out into curves.

Dating a hedge, however, is a matter partly of luck and perseverance, even in Cornwall where many hedges can be placed within the parameters of prehistoric, mediaeval, post-mediaeval and modern. Some can be dated more accurately. The first thing is to try to find a map without the hedge on it. This gives a starting point for your search. Title deeds might be of help, but most are likely only to go back to some obscure transaction within the last two hundred years. Before you start, you should have a look at examples of hedges of the different ages, and get an idea of how they look on the ground and on the 1:25000 map.

Take the practical approach, and beware of

dating theories and generalisations. Books can be badly misleading. "Hedges and Walls" published by the National Trust in 2002 advises that "Ruler straight boundaries are normally post-1700, gently curving or slightly sinuous ones usually derive from piecemeal enclosure in the 15th to 17th centuries; while hedges which follow an irregular line are probably of mediaeval origin. Hedges which run continuously for some distance with other boundaries abutting up against them, are often the earliest features in the landscape." This advice definitely does not apply throughout Cornwall and should be ignored.

MAPS AND OTHER PAPERS

The first step is to look at the tithe map of 1843 in Cornwall County Records, by prior appointment. Your hedge is likely to be shown on it, and you must take note of the pattern of hedges in that area, say about a mile square. You are allowed to take photographs with your own camera. Copy out from the list of fields, which accompanies the map, the entries relating to the enclosures within your mile square. Then ask the staff if there are any old estate maps which show your area if they exist; they are likely to be much older than the tithe map, eg the Grenville estate atlas dated 1690. They have the ordnance maps for 1890 and 1906, and you should get photocopies of each of these relevant to your query. There are other archives which the staff know about and can tell you where they are.

While you are at Old County Hall, visit the Cornwall Historic Environment Section, by appointment is best, taking with you the Ordnance Survey grid reference of your hedge. Ask if they have any records of your hedge, or of the area around it, in their Historic Environment Record. This is a computer database which lists the historic remains known in Cornwall and may well have a specific reference to your hedge. It includes old maps, ground and aerial photos, details of historic character and designations. Specifically ask for their informal opinion as to your hedge's age.

There are other less obvious sources of information. One of your neighbours may have already researched the locality. Your parish or town clerk may be a fount of knowledge. If your hedge is next to a road or railway, there may be Acts of Parliament which caused the hedge to be built. The County Records Office has volumes of old Acts, but you have to know what you are looking for. It also holds some records of Enclosure Awards, which are very useful. Unfortunately few of these sources have fields indexed under ordnance survey numbers or grid references, and you have to know the parish, the farm name, estate or manor depending where you are looking.

RELATIVE DATING PRINCIPLES

Peter Herring, in his unpublished thesis *An Exercise in Landscape History* (1986), has made a list of relative dating principles which are very useful in understanding how hedges relate to other features in the landscape in the terms of when each was built. With his permission they are given here. He has put them into five classes:- physical relationships, functional relationships, systematic relationships, hedging patterns and state of repair.

PHYSICAL RELATIONSHIPS

Physical relationships are the most reliable indicators of relative chronology as they are directly observable and thus require no supporting assumptions. Ordinary repairs and

refurbishment are likely to be confusingly in different styles.

Superimposition. A later feature is on top of an earlier one, eg the wall of a building that incorporates a bit of hedge.

Cutting. An earlier hedge is sliced by a later one.

Abutment A later hedge ends on, or leans on, an earlier one. The earlier hedge must be of one build and the later hedge must be built up to and against it and not bonded in.

Incorporation. An earlier hedge or wall is used by a later one(s).

Same Style. It is obvious that both bits of hedge were built by the same man at the same time. Note that this is unreliable because of the limited styles available, and the skill of hedgers in repair work.

Robbing. Robbed features pre-date immediate neighbours which have clearly robbed them. Such relationships are surprisingly rare, and are too easily assumed.

FUNCTIONAL RELATIONSHIPS

An understanding of why a hedge was built, in relation to things around it. But must be used with caution.

Hedges working within a functional system. If one or more hedges are unable to operate without the existence of another feature, it may be assumed that all are contemporary.

Redundance. If the usefulness of a hedge has been removed by something else, the hedge is likely to be earlier.

Incidental destruction. If a hedge was incidentally damaged by something else, the hedge is likely to be earlier.

Closeness of functionally related features. Where a hedge is not physically linked with something else, it may be linked functionally and therefore be of similar age eg hedge around a well.

Hedge around a well, obviously built at the same time as the dipping place and carved stone spout were constructed.

SYSTEMATIC RELATIONSHIPS

These principles are for using on plans and maps.

Respect for earlier features. The location and nature of a hedge can be influenced by something pre-existing, eg where a hedge swerves around a building.

Primary lines. Hedge lines from which others come, or hedge lines which have been slighted (eg by others cutting across them), can be considered chronologically primary eg an ancient road bridge. Note that subdividing hedges may have been built at the same time as a boundary, especially in primary enclosure from common.

Perpendicular Junctions. Without evidence otherwise, at a perpendicular junction, the hedge line from which the other hangs may be treated as being earlier.

Accretion. Employing principles of Primary Lines and Perpendicular Junctions, it is possible to show the development of a field system running outwards from a farmstead site. Note that the outer boundary of the field system may also have been pushed outwards.

Internal Division of a Primary Enclosure. Intermediate hedges may be built following primary enclosure from common, or in a later reorganisation, with probable enlargements, of fields.

Staggering of Hedges. Where one hedge is slightly staggered at a cross-junction, the crossed hedge is likely to be earlier.

Corners of fields. Where two hedges join at a corner, without evidence of others, it may be assumed that they are of similar age. This is especially unreliable following field enlargement which removes parts of an earlier system.

Repetition of Alignment. Hedges which are parallel may, depending on other evidence, be of similar age. Note that successive hedges into common are often parallel, although may be of very different ages.

HEDGING PATTERN

Is where a hedge has the same hedging pattern as a hedge close by that has been dated by other means. Must be used with caution, especially where there is little variety of hedging style in the locality.

STATE OF REPAIR

The state of repair of a hedge depends on its material, construction and damage from plants, animals (including man) and the elements. Neglect by the farmer is also critical. It is notoriously unreliable as a method of hedge dating.

COMMON TYPES OF HEDGE IN CORNWALL

Cornish Hedge. Built of two faces of coursed stone with subsoil (rab) fill which is rammed into place between the two faces with the laying of each course. Because the fill is flexible, the sides have an inwards curved batter to preserve stability. The inward tilting of the stones also helps to draw water into the hedge, reducing desiccation. There is side and topgrowth, sometimes luxuriant.

Stone Hedge. Built only of stones. The two faces of coursed stone are separated by a fill of stone which, although un-coursed, is laid carefully without voids with the laying of each course. Usually the stone is irregular in shape, or small, and difficult to build with, sometimes approximately the size and shape of a grapefruit. Because the fill is flexible, the sides have an inwards curve to preserve stability. Courses are usually horizontal.


Stone hedge.

Drystone Wall. Built only of stones. No

Single wall. Taken at a gap which shows construction. Yardstick shows height to be about 6 feet.

earth or small stones are used for filling, although a few small stones are used as wedges. These hedges are widespread in upland areas of Britain where there is plenty of loose stone obstructing the land, but confined mainly to localities with easily split sedimentary rocks. The nature of the stone enables it to be laid so that the two faces are keyed across the hedge with each other. This security means the wall is built with parallel sides. Courses are usually horizontal. [Dry-stone walls are not traditional in Cornwall and may be found only occasionally in the slate areas of North Cornwall.]

Single-stone hedge. Apparently carelessly thrown up but in reality very difficult to build with the single face; the surfaces of the coarse-grained granite stones are used to grip by friction. Although the size of the stone diminishes upwards, there is no obvious following of horizontal courses. The face is irregular, and daylight shows through to make the wall seem insecure, which is said to deter sheep from attempting to climb over. Relatively ineffective against cattle which, rubbing on the wall, demolish it. Often late-mediaeval. Traditionally used as a temporary block for gateways while the fields are in corn.

Tombstone hedge. Large stones and boulders arranged in a line as a low field boundary. Sometimes the remains of a much higher stone hedge. Some are recent, post-tithe-map.

Tombstone hedge.

Wall of a Building. Built only of stones with lime-mortar or rab filling between the joints of each facing and to compact the filling of stone or rab. Fragments of walls of buildings are often incorporated in hedges, and sometimes difficult to detect.

Stone-faced Bank or retaining hedge. Earth clad with one stone face. This face often also has a ditch to increase its height, as well as to provide building material and drainage. Construction is similar to that of a Cornish hedge, although batter is often omitted thus increasing maintenance costs. The ha-ha wall is a more pronounced version, with the stone face set along a fall in the ground enabling an uninterrupted view across the landscape, while still preventing livestock from entering the garden - usually associated with country mansions.

Lynchet showing build-up of earth on the uphill side (to left of picture) almost to top of hedge.

Turf Hedge. A mound of earth clad with two turf faces. Because the fill is flexible, the sides are battered with an inwards curve to preserve stability. There is side and topgrowth, sometimes luxuriant.

Lynchet. A feature of sloping land. A large ledge or step comprised of washed-down soil accumulated on the up-hill side of a hedge, so much that the field above the hedge is often

one metre higher than the field below the hedge. Following removal of the hedge, the step in the contours of the field is the only feature indicating the previous existence and line of the hedge; and this is gradually eliminated by repeated cultivation.

Stone-faced (Revetted) Lynchet. A lynchet with the lower side stone-faced. The stone face may be the remains of a removed hedge, a subsequent rebuilding to retain the soil, or an original building, course by course, as the lynchet got higher with cultivation of the up slope field. Not to be confused with a ha-ha wall.

Gurgoe (pronounced gurjey). A unique Cornish word which describes a now-redundant field boundary which is likely to be no more than a low mound of earth or stone. Often quoted in older documents in respect of farm or mining boundary disputes. Some gurgoes are prehistoric, possibly Neolithic (5000 years ago). Important in the listing of ancient landscape features.

DATING BY SPECIES IS DUBIOUS

Plant life can sometimes give a rough indication of the age of a hedge. The flora in the hedge was established by the seed present in the soil when it was built; for instance, if a field hedge displays a rich heath flora it will date back to the time when the heathland was first enclosed, or at least to a time before the land was first ploughed for arable cropping or re-seeding with grass. Similarly a woodland flora might date the hedge to first enclosure at any time after woods were cleared. However, this is now more difficult to establish as virtually all of Cornwall's hedges have been degraded by incorrect trimming by flail, reducing the flora often to a uniform invasion of ivy and a few other rampant weeds. Species counts are in any case virtually useless for dating hedges; too many factors intervene, giving widely inaccurate results.

The popular notion that hedges acquire more woody species over time and can be dated by counting the number of these is very dubious, and certainly does not work in Cornwall. Here the biodiversity of a hedge is originally related to vanished or existing nearby habitats, or to local climate, and very much to the way the hedge has been trimmed and maintained. The woody species on top may have been planted there long after the hedgebank was built. Originally its growth depended on the species present in the soil when it was built. As cultivation rapidly depletes the natural seed-bank, and many parts of Cornwall remained as heathland grazing, un-hedged and unbroken for thousands of years, species-rich hedges were being built on this land many centuries later than others with a similar count. In every hedge and hedgerow the way in which it has been maintained is the main decider of its species present. Observation over a lifetime suggests that Cornish hedge species, given no adverse interference, are remarkably static; and given that interference often is adverse, the tendency is to lose, not gain, species.

The so-called Hooper's Rule is supposed to give the number of centuries in the age of the hedge by counting the number of tree and woody species, both sides, in thirty yards (27m) of hedge. Hooper's prediction was based on a survey of 227 hedges in lowland England between Gloucester and Lincoln that had already been dated by other evidence, going back to Saxon times. It is a pity that his survey stopped short of Cornwall where some of our four-thousand-year-old hedges have no woody or tree species growing on them at all. Conversely, some landowners, including the Victorians, planted several woody species in their new hedges. At Ruan Lanihorne, a new hedge was planted in 2003 of a mixture of wayfaring tree, spindle, wild privet, hazel, field maple, alder, dogwood, guelder rose, crab apple, buckthorn, quickthorn and blackthorn. Under Hooper's Rule, this hedge is already over one thousand years old.

Hooper himself acknowledged that 'hedge management raises another difficulty.' His own statistical analysis suggested that nineteen out of twenty hedges with ten species could be

aged anywhere between 900 and 1,300 years old, and the twentieth not even within those years. He stressed that the number of species present was coincidental to the known age of some of the hedges he surveyed, and was later at some pains to correct the impression that this could be taken as a rule. Allen (*Bramble-dating*, 1971) commented: 'The technique that Dr Hooper has described inevitably breaks down outside lowland England. Throughout the north and west there are simply not enough kinds of shrub according to his criteria - and note this qualification - to permit the rule to operate.' Hooper's co-worker Pollard introduced the concept of 'indicator species' which are typically associated with ancient woodland and only colonise new areas very slowly. Again, these do not apply very well in Cornwall. Experience has demonstrated that attempting to use Hooper's hypothesis to date hedges in Cornwall is very unwise.

Some people say that the age of a hedge can be calculated by the age of trees. Ralph Whitlock in *The Oak*, 1985, advised that 'to form a rough estimate of the age of a tree, allow one year for every inch [2.5cm] of trunk circumference. This is for trees in open country; for trees in woodlands allow two years for every inch. The circumference should be measured at five feet above the ground.' In Cornwall this average, if it is relevant, conceals such a wide variation with different soil types and wind exposure as not to be any guide; and it does not allow for coppicing, which has been done to most of our hedge trees. It might be possible to saw out a section of the coppice stump showing the tree rings which may give an indication of the age of the tree but, of course, not of the hedge. It would be damaging the tree for nothing.

The extent of bramble variety in a hedge may be a more valid way of assessing age than by any other attempt to create an estimate from species present. There are more seedling varieties of the bramble, or blackberry, in Britain than there are days in the year. Apart from having varying blossom and differently-shaped berries, the varieties also differ in the size and spacing of their prickles. The blackberry usually spreads by tip-rooting rather than by seed, so, if in a length of about 100m of hedge there are four or more very different types of bramble, the hedge is likely to be an old one; or else it gained its brambles from ancient scrub alongside or perhaps has been contaminated from nearby gardens, as some garden varieties hybridise readily. This can usually be detected by the much stouter stems than are seen in wild brambles.

WHAT TO DO NEXT

Having assembled all the documentary evidence that you have been able to find, you may find that the hedge was built at some time after the first record you have found. Then it is a narrowing-down process within a period when things were written down. The more that you find out, the easier it is to find out more, for instance, some of the old files of solicitors are at County Records, but you have to know to ask for the specific papers and you may spend hours looking through old letters and reports without finding anything. On the other hand you may unearth a fascinating story. If your locality was part of an existing landed estate, their estate office may be able to help you.

Perhaps, unluckily, you may have come to a full stop, apart from knowing that the hedge was in existence on the tithe map in 1843. Your hedge may be any age between 5000BC and AD1843. This is where historical research may be of some help. The farm place name may give you an idea of the age of the original hamlet, but may be later and have been derived from an ancient field name, or from a farmer with a local name. Certainly if it had an English name, like Broad Langdon (= broad long down), the existing hedges are not likely to pre-date AD900. There may have been an earlier Cornish hamlet, but with the name change there would probably have been a complete rearrangement of the fields.

Now you have to use your imagination and try to reconstruct the landscape within your mile square. The first thing to remember is that the route of every hedge, and each kink or corner, had a reason when it was built. The contours of the land and streams may have their influence. Typically a rounded hill top may have circular hedges running along the contours in a perfectly reasonable way; but looking at the hedge lines on a map, without realising about the contours, may lead to incorrectly diagnosing the typically circular enclosing boundary of a deer park. You need to relate all the hedges on the plans with the contours and other physical features on the 1:25000 map, and with them on the ground.

PREHISTORIC HEDGES

This survival of a nearly intact Bronze Age field system has its pattern of hedges still visible in these small fields in West Penwith, though even here some kinks show where hedges have been removed.

In a few places in Cornwall the pre-Celtic fields are still of exactly the same layout as they were about three thousand years ago. Additionally, where there has not been a wholesale re-modeling of the landscape which removed all the ancient hedges, some vestiges of earlier prehistoric hedges often survive. Sometimes the original boundary hedge of the earliest farm still shows within later extensions. One or two of the tiny fields may remain intact, or there may be kinks in the hedge lines where another hedge once joined, which show much better on the 1:25000 maps than on the ground. Each kink tells a story, and with experience you may develop the skill of identifying remains of prehistoric hedges on the map, and then have the joy of seeing them on the ground. On the other hand, an identical-looking kink may just be the remnants of a miner's smallholding not older than 200 years.

During the mediæval period, when populations grew and farming became more skilful, many villagers stuck to tradition and merely enlarged their fields by amalgamation, still keeping the irregular squarish shapes. These are simple to identify where they contain remnants of prehistoric hedges, but without these they cannot easily be distinguished from piece-meal encroachments on to the common at any time, or from miners' or other smallholdings laid out a thousand years later. Some of the miners' hedges may be identified positively if they are built with blast-broken spoil from the mine, rather than the naturally-occurring weathered moor-stone.

Bronze Age field hedge in West Penwith. Note kinks in hedge where other early hedges, once abutting, have been removed.

On the reasonable assumption that most hamlets had some common land, it is worthwhile trying to identify where it is or, more likely, where it might have been. Here a knowledge of heathland habitat is useful

when visiting the site. If you can see on the map where the common was, and the hamlet associated with it, then you can start to try to work out the sequence of hedges which spread out from the hamlet into the common over the centuries. This was not always a logical sequence, some encroachments took place over a long period of time, others happened with a single action, eg under an enclosure act or a change of landowner.

STITCHES

With the widespread use of the turn-wrest plough from about 1300 BC, many families started to remodel their fields into stitches. This process went on until the 19th century. Most of the old hedges were removed and the material rebuilt into the new hedges enclosing the now narrow fields in neat rectangular rows. The clue is that the internal hedges dividing the long axis of the rectangle are strictly parallel, often with a slight curve to the end. This pattern does not exist for any other reason in the historical Cornish landscape. Only a few of these remain today, relative to the number that were built, but so many are shown on the tithe maps that you will get the right idea to relate to what still exists today. It may be that only a couple out of the original row of parallel hedges are still there, but with the knowledge of what was before, you will identify them for what they were.

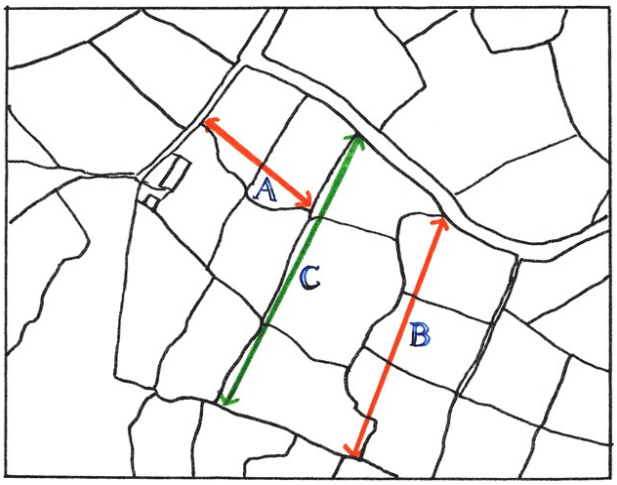
Although we know that fields were divided into stitches in mediaeval times, we do not know when they were hedged; modern dating techniques may well solve this problem. In stony areas, many hedges were started as soon as the stitch was ploughed, because of the need to dispose of clearance stones. Others would not have been built until the commons gradually disappeared into enclosures and the manner of keeping livestock changed. Perhaps some stitches were hedged as a result of breaking up the former communal field into individual ownership, or even because of quarrels between neighbours, all of which could have been at any time until two hundred years ago. Certainly, this re-modelling did not all happen at once, and probably continued until the 19th century. Some stitches may never have been hedged, and later were easily turned into large fields. The Forrabury open-field preserved near Boscastle still is without hedges. The anglicised open-field system tended to happen more in the north and east part of Cornwall, and the modern map still shows many examples of relict open-fields. If looking for these on the ground, be warned that the 1:25000 map shows hedges which are no longer there, some even having been removed some years before the map was last updated.

This long row of mediaeval fields (across middle distance) shows where intervening parallel hedges have been taken out. Fourth field from left remains as a narrow curved stitch. The upper half of the next hedge has been swung at a right angle to join the next, making two oddly-shaped fields, perhaps to give neighbours an equal share with less labour in the alteration. The green field third from right has had five or six internal hedges removed. Kinks in some of the stitch hedges suggest they may have been part of a yet earlier system.

DATING HEDGES BY MAP READING

Looking at the historic hedged landscape and interpreting its appearance on the map is a more reliable method of dating. Field patterns changed characteristically with the historical period, and even today the original layout and surviving hedges can often be recognised.

Bronze Age fields were very small, perhaps only a quarter of an acre, and of a roundish shape. With the coming of the plough, fields were made longer, to avoid having to turn the oxen so frequently. These long narrow fields were sometimes curved, particularly at the end to make turning easier. Later again, these narrow stitches would have alternate hedges removed to enlarge the fields. On the map, these alterations may be clearly seen where remnants of the different field systems still stand.



This sketch-map of some fields in West Penwith shows the larger size and regular shape of the fields following an early, probably pre-Norman, re-organisation of the hedges. Note the incorporation of those parts of the older bronze age hedges which ran in a convenient direction. The hedges at A and B marked in red are the remains of prehistoric field boundaries which happened to be in the right place when the fields were reorganised. Their curved sinuous lines clearly show that they were once part of a series of much smaller, more rounded fields. The later hedges (an example at C is marked in green on the sketch) are straight, or as straight as a pre-mediaeval hedger would care to build them. This later (pre-Norman) arrangement of hedges in the landscape is identified by the repeating of the small fields of about three-quarters of a hectare. Care must be taken not to confuse this farm landscape with smallholdings associated with the 18th and 19th century heyday of mining. These are often so similar that only the mining history of the locality and the smaller homesteads, little more than a cottage and barn, give firm indications of the later origin of the hedges. Miners' holdings also are usually carved out of the fringes of moorland or other uncultivated areas, rather than among the established farmlands below.

The next major alteration of field boundaries to be shown on maps was the widespread removal of hedges to set up open-fields, some with the stitches (divisions) hedged. To get an idea of an open-field landscape in the 17th century, where remnants of the field systems with many of the stitches still hedged can be seen, look on the 1:25000 map at the land north of the Indian Queens to Newquay road (A392), up past St. Mawgan airfield and St Eval to St. Merryn. In contrast to much of Cornwall, this area was less affected by tin and copper mining. Much was part of the manor of Pawton, and stayed in church ownership for 450 years giving a continuity which is apparent in the sameness of the villages and hamlets, with the preservation of their Cornish names.

Starting just north of the A392, the enclosures south-west of Tredudannon have the appearance of burgage strips, each with its cottage in a row at the hamlet. The date of such cottages standing in their own piece of ground, perhaps built by estates for their workers, will date the hedges. The fields around Trencreek, on the edge of Newquay, have remnants of two layouts of stitches; the one to the north of the railway has the internal lane access characteristic of an open-field. Tregaswith, west of St. Columb, has good remnants of stitches at Brooklands. On the south side, although many of the original stitches either were not hedged, or the hedges

Hedged mediaeval stitch surviving near Newquay in 2007. Typically long and narrow with slight curve at the end.

have been removed, there is a short length of double hedge shown on the map which clearly indicates another classic open-field. A similar situation may have been at Bosoughan, to the south-west. Moving to the edge of St. Mawgan airfield, much has been obliterated by the runways. Some of the stone for the runways came from hedges demolished at Bedrugga. This used to be part of the manor of Bejowan; there is written historical evidence for arable strips at the hamlet of Bedrugga ("intermingled parcels") and at Trebulzue ("pieces ... in a common field", and "in diverse parcels divided").

Crossing the airfield to Tregurrian, this was surveyed in 1606 as part of the manor of Carnanton then in the hands of the Crown, the surveyors enumerating acres "in communibus campsis [in common fields] ... in stychemeal [divided into stitches]". The survey of lands of the adjacent hamlet of Trevarrian estate adopts a classification of land which acknowledges that many farms had both closes and unenclosed strips: the surveyor divides the acreage of each farm into three categories, in "claus" (enclosed), "vasta" (waste) and in "stitches". The enclosed land probably included the fields on the north-east side of the hamlet. The waste included the cliff land behind Berry's Point and Griffin's Point. Of particular interest today are the hay meadows bordering the river at Mawgan Porth where the mowing stitches still have their dividing ditches. Meadows tended to be sited on land which was flooded during winter, but which dried out early enough to give a bumper hay crop. This was used to feed the breeding livestock during winter when the pastures had been eaten off.

Mediaeval hay meadows (foreground) still survive near Mawgan Porth. Original drainage ditches divide the mowing stitches, though two ditches appear to have been filled in across the plot at centre, and one to the right. Parallel hedges have similarly, probably long ago, been removed from the row of fields, once stitches, immediately beyond the hay meadows. The straight hedges on the higher land are of much later date. They show recent hedge removal, leaving odd corners sticking out.

The word "down" usually describes less fertile land which was likely to have been common land in earlier times. To the south of the hamlet of Engollan there is a pattern of stitches clearly indicating an open-field, though traces of the access tracks having almost disappeared. To its east are traces of the 150 acre common which was enclosed in 1855. Penrose, to the north-east, still has many of its hedged stitches, the access track to the north-west being clearly defined, its original function being perpetuated in part as a public footpath down to the corn-mill at Porthcothan.

Kilkhampton churchtown is a unique surviving example in Cornwall that shows the structure of a mediæval village. Again a close look at the 1:25000 Explorer 126 OS map shows the outlines of the fields and village plots much plainer than is seen on the ground. Kilkhampton is well served with footpaths and a half-hour exploring the village hedges with the map in hand is worthwhile.

As a general rule, the straighter the hedge and the larger and squarer the field, the more recent is the hedge, though curiously, some large (for Cornwall) fields of 15 acres (6 hectares) were present in Tudor times, as at Bodrugan, near Mevagissey. More easily identified are the latest areas of rough land to be reclaimed with government grants, which are in large straight-sided enclosures (usually with wire fences), as at St Breoc Downs next to the St Columb to Wadebridge road. In many places they very obviously cut into, or replace, the downland on the higher hill tops. Another recent feature to be seen on maps is the enlarged fields where old hedges have been removed by machinery during the past half-century. These are often quite easy to spot as a noticeably bigger field, or group of fields, among smaller surrounding ones. Often they are betrayed by a corner of one field sticking out into the enlarged field, having lost the two hedges that used to join it. Some hedges still shown on the map are actually no longer there on the ground, having been removed during this period and the maps not yet updated.

MINING UPHEAVAL

It is said that the principal mining area for tin, lead and copper was in a twelve-mile-wide belt between St Just and Tavistock, most of it of course in Cornwall. Mining also took place less concentratedly elsewhere in the county. In reviewing hedges within this area, you should keep in mind the utter devastation of the countryside meted out by the mining activity, at its height by the 19th century. From Carn Brea, south of Camborne, more than 250 smoking engine houses could be seen. Dumps of mining waste would swallow up existing hedges, perhaps to be in turn levelled out and hedged over years later, with little or no trace remaining of the spoil tip or the original hedge layout. Conversely, nearby hedges may have remained intact. The early OS maps are a help, but they come at the end of some 500 years of intensive mine excavation and associated surface industry.

River valleys may have been streamed for tin time and time again over a period of 2000 years, with farming interludes between. In each interval, hedges were built, only to be removed when streaming started again. There is no knowing, without scientific analysis, which bits of hedge would be ancient, and which would be recent. Silt was still being removed for washing during the 1980s just before the world tin price collapsed. The same operators were also removing mine burrows, and hedges, or remnants of them, along with them.

Hedges built of mine spoil, usually roughly broken pieces in a mixture of granites and metamorphic rocks, were mainly built from the 18th to early 20th centuries. They can be recognised by the sometimes colourful varieties of rock from the near-black of basalt to the pure white of quartz, with veined and other patterns of stone often marked with the red-browns, greens and ochres of ore-staining.

Typical 19th Century hedge built of mining spoil, near the industrial centre of the Camborne/Redruth area.

RECENTLY-BUILT HEDGES

Recent non-farming activities, eg village development, new roads, have caused hedges to be demolished, but also some new ones to be built. These are mainly along new or altered sections of road, or round development sites. Frequently they can be recognised because they are built of stone alien to the area, eg shale in granite country. Generally their construction is poor, but if properly built in traditional manner, they may have the appearance of much older hedges. Usually their age can be found by looking at the OS maps.

Other new hedges are mainly along house frontages. On new housing estates these are likely to have been built by the contractor and may be of very poor quality. As a general rule any hedge that is poorly-built, as distinct from being merely in a poor state of disrepair, and is associated with town or village and modern infrastructure, is likely to be less than 60 years old, though some new hedges built to garden frontages perhaps on older properties or on modern barn conversions may be well-built if the householder employed a craftsman hedger.

With thanks to Peter Herring for permission to quote from his unpublished papers.

Titles of papers available at www.cornishhedges.co.uk

Advice for Working on Roadside Hedges	Mediæval Hedges in Cornwall (450AD - 1550)
Advice for Trimming Roadside Hedges	Modern Hedges in Cornwall (1840 - present day)
Building Hedges in Cornwall	Mosses, Lichens, Fungi and Ferns in Cornish Hedges
Building a Turf Hedge	Pipe-laying and Other Cross-country Works Involving Hedges
Building and Repairing Cornish Stone Stiles	Post-Mediæval Hedges in Cornwall (1550 - 1840)
Butterflies, Moths and Other Insects in Cornish Hedges	Prehistoric Hedges in Cornwall (5,000BC - 450AD)
Check-list for Inspecting New or Restored Hedges in Cornwall	Repairing Cornish Hedges and Stone Hedges
Check-list of Types of Cornish Hedge Flora	Repairing Turf Hedges
Code of Good Practice for Cornish Hedges	Restoring Biodiversity in Cornish Hedges
Comments on the © Defra *Hedgerow Survey Handbook* (1st Edition)	Risk Assessment Guidance for Working on Cornish Hedges
Comments on the © Defra *Hedgerow Survey Handbook* (2nd Edition)	Roadside Hedges and Verges in Cornwall
Cornish Hedges and the Climate Crisis	The Curse of Rabbits in Cornish Hedges
Cornish Hedges in Gardens	The Life and Death of a Flailed Cornish Hedge
Cornish Hedges on Development and Housing Sites	Trees on Hedges in Cornwall
Gates and Gateways in Cornish hedges	Unusual Old Features in Cornish Hedges
Geology and Hedges in Cornwall	Who Owns that Cornish Hedge?
Glossary of some Cornish Words used in the Countryside	Wildlife and the Cornish Hedge
Hedges in the Cornish Landscape	
How to Look After a Cornish Hedge	
How Old is That Cornish Hedge?	
Literature Sources	