## SOCIAL FORESTRY NETWORK

# HEDGES AND HEDGEROW TREES IN BRITAIN: A THOUSAND YEARS OF AGROFORESTRY

## **Oliver Rackham**



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This network paper has been produced in order to try to raise the status of hedges and hedgerow trees in the thinking of foresters and others involved in agroforestry - types of tree-production which have often been regarded as marginal in more ways than one.

The paper is made up of much shortened versions of Chapter 9, <u>Hedges and field-walls</u>, and Chapter 10, <u>Trees of hedgerow and farmland</u>, in Oliver Rackham's book, <u>The History of the Countryside</u>.

Rackham has been able to track down information on hedges in Britain stretching back over more than a thousand years in some areas. In the process we are treated to information on the very intensive management of hedges which went on in the past, some of the methods used, and the tremendous productivity and longevity of hedges.

We have tried to retain as much of the broad interest of the original as possible, while taking out material only of interest to someone living in Britain.

Since so many farmers of the Third World are currently in the process of creating hedges for the first time, or of intensifying the management and diversity of their hedges in response to a land squeeze, we hope this paper might inspire some readers to look with renewed interest at hedging practices in their own areas - and perhaps indeed to write to the network about it.

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#### HEDGES AND FIELD-WALLS

Regions with and without hedges are to be found over much of the world. In general, traditions of hedgeless open-field or prairie-farming belong in great plains or broad valleys. Where the whole of a region is not hedged, hedges tend to go either with hilly terrain or with the neighbourhood of woods.

#### **Where Hedges Come From**

In Britain, hedge-planting is familiar and well documented; nearly all more recent hedges have certainly been planted. (But) let us not slip into the generalization that all hedges have been planted: there are two other ways to get a hedge.

North America lacks this hedge-planting tradition: settlers fenced their fields with wood or wire. Yet the United States now has more miles of hedge than Great Britain. Americans believe that nearly all their hedges arose by default. Tree saplings sprang up alongside the fences and eventually replaced them. The prairies of middle Texas, originally maintained by wild animals, were parcelled out into farms and fields by barbed-wire fences in the 1880s. Seedlings of Texas elm, black oak, Texas ash, prairie sumach, poison-ivy, and many other trees and shrubs have sprung up at the bases of the fences, which have sheltered them from browsing and cultivation. The hedges have advanced gradually: aerial photographs prove that many of them were discontinuous, or not there at all, twenty years ago. There can be no question of any planting this has been a time of declining prosperity. Tree seeds have arrived naturally from the wooded canyons nearby. People have failed to prevent the trees from growing, and doubtless have found

them a useful relief from replacing rotten fence-posts.

Later stages can be seen in other States. Michigan is parcelled out by nineteenth-century fencerows. In Massachusetts the seventeenth-century fences were replaced by eighteenth-century hedges. They are seldom managed except by casual woodcutting.

Has this happened in Britain? Our tree species have much the same colonizing powers as their American sisters. Close to Hayley Wood (Cambridgeshire) there was a railway from 1892 to 1969, separated from the adjoining field by the usual wire fence and shallow ditch. Since the railway has been disused, trees and shrubs rooted at the base of the fence have grown into an almost continuous row which it will be possible to maintain as a hedge. Probably the railway-men who moved the grass verges were unable to reach a narrow strip at the base of the fence.

That this has not happened more often in the last 200 years is because farmers and labourers have had time on their hands in slack periods and have chosen to spend it in tidying, 'brushing', and suppressing young trees. Fences turn into hedges by birds sitting and dropping seeds; the fence protects the incipient hedge.

Hedges arise in a third way as the 'ghosts' of woods that have been grubbed out leaving their edges as field boundaries. The marginal trees, often already forming a hedge to protect the wood's interior, may be left as a hedge having woodland, rather than hedgerow, characteristics.

#### **History of Hedges and Walls**

#### **Prehistoric**

In the Land's End Peninsula there is one of the most impressively ancient farmland landscapes in Europe. The Peninsula is a moorland-covered granite dome surrounded by a belt of farmland, with a strip of rough grazing bordering the cliffs of the coast. The farmland is of tiny irregular pastures separated by great banks, each formed of a row of huge granite boulders - topped off

level with lesser boulders and earth. Their function is to dispose of the boulders which had slid down from the moorland onto the fertile land. The banks zigzag and deviate in order to incorporate immovably large boulders or small outcrops. This is a famous example where the whole system is of a piece. The banks, from their construction, are contemporary with the fields; once formed they are difficult to alter and cannot be added to. They can be roughly dated by the Bronze Age objects which were buried in the banks. These banks, indeed, are among the world's oldest artifacts still in use.

#### Roman

The Romans in Italy had a long and elaborate tradition of hedging. The most ancient authors preferred a living hedge to a constructed fence, because it not only called for less expense, but was more permanent and lasted for an indefinite time.

Siculus Flaccus, a first century AD writer on surveying, says in a section on boundary-marks:

If hedges form the boundary, record their species; whether they are only on the extreme edge [of the property], because there are often bushes in the middle of fields owing to farmers' neglect; and whether they are artificially planted. For if a region does not have shrubs which can form a protection for vineyards or gardens, they are imported from distant regions and planted. And trees are often to be found put in hedges.

The Romans knew about plashing (thickening) a hedge, but it was evidently a wonder of far-off lands and was not familiar in the Italian countryside. Julius Caesar encountered the practice only just outside Britain in c. 55 BC. The Nervii tribe, he says, had an ancient practice:

They cut into slender trees and bent them over so that many branches came out along their length; they finished these off by inserting brambles and briars, so that these hedges formed a defence like a wall, which could not only not be penetrated but not even be seen through.

There is some evidence for hedges from excavation. For instance, part of an actual hedge may have been excavated at Bar Hill (Dunbartonshire). Beneath a Roman fort were found hawthorn

stems showing the characteristic distortions, cuts and calluses produced by hedge management. It appears that there had been fields divided by plashed hawthorn hedges and ditches. When the fort was made in c. 142 AD, the hedges were levelled and the remains buried.

#### **Anglo-Saxon**

Old English has several words for hedges and the like, some of which have been preserved by their existence in place names. The commonest word for hedge, 'haga', is the 'haw' or 'haugh' of place-names such as Northaw and Thornhaugh.

Occasional hedges are named after beasts, which perhaps they keep in or out: I have found six roe[deer]-hedges, six swine-hedges, two wolf-hedges, and a hart-hedge.

Anglo-Saxon hedges were not related to particular soil types, but were quite closely correlated with woodland. They were not necessarily the boundaries of woods, although some were. Hedges existed mainly in regions that also had woodland: they were not, as a rationalizer might guess, a substitute for woods.

#### Medieval

There are several medieval allusions to the cutting of thorns and to their importance: this may be why spinneys - woods of thorns - were quite highly valued.

Hedge management is discussed academically by John Fitzherbert. After dealing with dead hedges he says: 'And lay thy small thorns, that thou hedgest with, over thy quicksets, (live cuttings) that sheep do not eat the spryng (regrowth) nor buds of thy sets' (Book of Husbandry, 1523). This suggests two other uses of thorns: to protect the 'quicksets' of a newly-planted hedge, or to protect the regrowth of a hedge newly cut to the ground for underwood.

Sixteenth and seventeenth centuries

Early maps often carefully distinguish hedges from fences, walls, park pales, etc. and from

unmarked boundaries. They show beyond argument that almost every parish in England had at

least a few hedges; that most of the Ancient Countryside was already fully hedged; and that the

majority of the hedges then existing were still there in the twentieth century. This is easily seen

in the published selection from the early maps of Essex.

Writers begin to draw attention to the difference between fully-hedged counties and those still

relatively unhedged. Thomas Tusser, in his book, 'Five hundred pointes of good Husbandrie, as

well for the Champion or open countrie, as also for the Woodland', (1573), notes that among the

many disadvantages of living in open country is the lack of firewood and the trouble of fetching

other fuels from a distance. Hence the term 'woodland', used by writers at this time not for

woodland in the normal sense, but for land possessing hedgerows which produced wood.

There had been nurserymen at least since the fourteenth century and Tusser tells us to:

Buy quickset at market, new gathered and small,

buy bushes and willow, to fence it withall.

Evidence of the value of hedges as sources of wood does not depend on generalized writers

alone. In south Essex, surveys often treat hedges as woods, giving areas and years' growth since

last felling. The Elizabethan age was a time of rising demand for fuel, some of which came from

hedges. The 1590s and 1600s were terrible years of cold and poverty. Courts took an increasingly

severe attitude to hedge-stealing. For instance:

Any persons breaking any hedge or stealing wood be put next Sunday or holiday

in the stocks (ie open-air imprisonment) for 2 hours at the least, and the wood be

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placed before them, signifying the cause of the punishment.

Felsted (Essex) 1567

Eighteenth and nineteenth centuries

The Great Enclosures, though not a universal transformation, were a time of more new hedging than ever before or since. The hedges planted between 1750 and 1850, probably about 200,000 miles, were at least equal to all those planted in the previous 500 years. The same applies to stone walls, in moorland country as well as on former open-field. The thousand million or more hedging plants needed to make 200,000 miles of hedge were big business, and founded the fortunes of several Midland nursery firms.

Even in Ancient Countryside, the pattern of hedges in 1900 was not exactly the same as in 1600, but the changes should not be exaggerated. The network remains mainly medieval, but contains many single hedges of all subsequent periods.

New hedging and walling in this period also transformed many Scottish, Welsh, and Irish landscapes; but we cannot yet say how much of these countries was affected.

**Recording and Dating Hedges** 

In the twentieth century hedges were taken for granted and thought to be uninteresting. The different kinds of hedge were not noticed, although their complex history was never quite forgotten. The scientific study of hedges began with the book on the subject by Dr Max Hooper and his colleagues (Pollard and others 1974). In the time of ignorance we supposed that the trees and shrubs in a hedge were determined, in some vague way, by soil, climate, or management, or by the whims of those who planted the hedge. Dr. Hooper noticed that all these were less important than the age of the hedge. He counted the tree and shrub species in 227 hedges whose age, varying from 75 to 1100 years, was known from written records, and found an unexpected correlation between species and age.

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The hedges of Rougham, Suffolk, have been studied by Mr David Dymond and Mr Colin Ranson. The parish is of common East Anglian type with a central, solitary church from which church-paths radiate to six ancient hamlets and four ancient farms. The youngest hedges, of 1 to 4 species, are in the middle and north of the parish on the site of open-field and commonland formally enclosed in the late eighteenth century. Mixed hedges, of 5 to 10 species, are in the neighbourhood of the settlements and throughout the south of the parish. Medieval Rougham evidently had a central open-field bounded by heathland on the north and surrounded on the other side by settlements each with its own hedged fields. In the south there may have been substantial woodland in the early Middle Ages, later reduced to the small ancient woods which still survive.

There are three hypotheses to account for Hooper's rule that older hedges have more species:

- 1. A hedge acquires further species as it gets older. Tree and shrub seeds are constantly being brought by chance and birds. They germinate and occasionally get established.
- 2. In earlier times it was the custom to plant hedges with more species than later. Enclosure Act hedges were generally planted with one species only, usually hawthorn: the large scale and commercial character of the operation encouraged simplicity, whereas earlier hedgers often had to use whatever saplings they could dig up in the woods or existing hedges.
- 3. The older a hedge, the more likely it is to be natural rather than planted, and therefore to be mixed from the start. Both kinds of natural hedge the ghosts of woods, and accidental hedges on the Texas or Hayley Wood Railway model are unlikely to be specifically documented; but conditions for them to arise have probably been much less rare in the past.

#### **Conclusions**

The study of hedges has suffered from the belief that they are merely artificial. From the American parallel I hazard the conjecture that perhaps one-quarter of those in England have arisen naturally along fences and boundaries, chiefly at times of recession and neglect. Already in Anglo-Saxon times there were newly-planted hedges and hedges inherited from the Roman landscape; but many hedges had probably arisen by default in the Dark Ages. This explains why there should have been more hedges in the vicinity of woodland: as in America, default more easily produces a hedge where there is a wood to provide the seed.

Hedges are more complex, and less easily replaceable than is often supposed.

#### TREES OF HEDGEROW AND FARMLAND

... To the two oaks that stand into the road; then along the hedge to the east of Lamhyrst; ... to the ivy-tod (ifihtan stoc); ... to the stock that the swing-gate used to hang on; from the stock out through the middle of Hill-lea to the old ash; from the ash south over the road to the apple-tree; from the apple-tree to the white hazel; ... along the hedgerow out to the Limburn ...

Boundary of Havant (Hants), dated 980 (A typical Ancient Countryside charter)

... Along the stoneway to the long crucifix at Hawk-thorn; then from Hawk-thorn to the long thorn at Icknield way; so to the third thorn at Wirhangra; from the thorn to the fourth thorn standing on Wrong Hill; so on to the fifth thorn; to the elder-tree (elebeame); then west along the little way up to the thorn ... along the old ditch to the place of AEpelstan's tree ... to the red-leaf maple tree ...

Boundary of Blewbury (Berks), dated 944 (A typical charter of downland and open-field)

This chapter is about the pollards and timber trees of hedges, trees standing in fields and around farmsteads, by watercourses, and on downland.

Hedgerow trees are poorly understood. Naturalists and writers associate trees with woodland; trees that do not fit that preconception are often misinterpreted as being an extension into the countryside at large of the eighteenth-century ideal of romantic landscape. Yet hedgerow trees are a distinctive and historic feature of England and probably Wales; they used to go far to make up for our relative lack of woodland. Most other countries that have hedges do not make our distinction between hedgerow trees and the rest of the hedge.

#### **Species of Tree**

Traditions of hedgerow trees differ from those of the nearby woodland. Oak is not the universal timber tree in hedges that it is in woods; hornbeam and lime are very rare as hedgerow trees. Among the peculiar trees of hedges, black and white poplars, though not now common, are of such historic importance as to deserve detailed mention. Elms have a separate chapter. Three poplars are native or ancient introductions to Britain. Aspen, now mainly a woodland tree, used to be quite common in hedges. Black and white poplars are meadow and hedgerow trees and have never been recorded in ancient woods.

## The Anglo-Saxon Period

The origin of hedgerow, field, and settlement trees is lost in antiquity. The first detailed records show that they were already commonplace by the eighth century AD. There were non-woodland trees in Classical as in modern Italy, but we are not told whether the Romans had them in Britain. The mysterious pit-alignments of Iron Age England - single rows of regularly-spaced soil-marks running sometimes for miles across country - have been proposed as rows of pits in which trees were planted to mark boundaries, but there is no means of confirming this conjecture.

#### Middle Ages

No trees are directly mentioned in Domesday Book but with the revival of record-keeping in the thirteenth century, evidence for non-woodland trees is resumed. They are usually beneath the notice of surveys, but are mentioned in almost any long run of estate accounts or of court rolls. There were hedgerow trees and trees sheltering buildings, around ponds, lining river-banks, and standing in fields. They gave rise to income, disputes between neighbours or between landlord and tenant, obstructions of highway, and petty offences:

John House complains that William Bene ... [in 1435] cut off the branches of certain trees of the said John, namely poplars and maples, growing in a certain hedge of his belonging to three rods of arable land of the said John's ...; and the

said William took and carried away the underwood of the branches which he had cut off; and ... the said William again [this year] in the same way cut off the branches of the said trees and took and carried away the branches whereby the said John has ... suffered damage to the value of 10s. [This evidently refers to pollarding.]

Court roll, Hatfield Broad-oak (Essex), 1443

John Petye cut down 1 poplar without permission ... [fined 2s] Will Gunnild cut down 1 abel and sold it without permission ... worth 2s 6d. [The trees were the lord of the manor's; Gunnild was apparently acquitted.]

Court roll, Nowton (Suffolk), 1310

The Lady Countess has one ancient and decayed poplar growing too far over the King's highway [and agrees to let the parish have it for a bonfire].

Court roll, Great Canfield (Essex), 1422

[A tenant] damaged the common highway and made a nuisance by cutting down trees.

Court roll, East Donyland (Essex), 1385

John Gru ... cut off the branches of an ancient oak without permission, amounting to 1200 billets worth 6s. [Another gigantic tree: there were about 500 billets to the ton of firewood.]

Court roll, West Donyland, 1392

John ... Gybbe cut down one willow in which was a swarm of bees (unum swarm

apum) and destroyed the said swarm and took the wax and honey. [Fined 40d.]

Court roll, West Donyland, 1391

The Suffolk and Essex examples are from well-hedged parts of the country, but non-woodland

trees existed even in open-field districts. They comprised both pollards and timber trees. The

latter, as in two instances just quoted, were often much larger and more valuable than trees in

woods. At Hindolveston, which had rather few non-woodland trees, I find that the average

income between 1255 and 1327 from trees on 2200 acres of farmland was £ 0.53 per acre a year,

equivalent to that from 12 acres of the local woodland.

Some records of non-woodland species exist. Ash is often mentioned, willow occasionally, and

alder once. Records are of timber trees or pollards and for this reason do not often mention thorn.

The species are independent of the local woodland. The commonest non-woodland tree could

be oak, ash, elm, poplar, or willow; there is not trace of the woodland convention of selecting oak

as a timber tree. Elm, although commoner than in Anglo-Saxon charters, was probably less

abundant than now.

Apart from the lack of exotic trees, the most striking difference from the present scene was the

abundance of (black) poplar, probably the fifth commonest non-woodland tree mentioned in

Suffolk and Essex. Poplar and abele, among the few native softwood trees, were much used for

floorboards etc in an age when conifers had to be imported.

Pollard willows along watercourses are recorded at Cambridge, both in the town fens (where they

still exist) and in the open-fields, and at Oxford.

Hedgerow trees probably increased in numbers during the Middle Ages in parallel with the

increase of hedges.

The Heyday of Hedgerow Trees, 1500-1750

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From 1500 to 1750 the earlier kinds of evidence for farmland trees are reinforced by detailed surveys, maps, and landscape paintings. Some of the trees themselves are preserved in pseudo-medieval parks.

Soon after 1495 Thomas Waring made a detailed survey of more than 2000 timber trees at Tanworth-in-Arden (Warwickshire). The trees, except for some small groves, were said to be in 'hedges'. Oaks were described in terms of the house timbers that might be made from them, and their bark was valued. Ashes were regarded as wheelwright's timber and are measured as so many felloes in length. This is the earliest and nearly the most detailed survey of hedgerow trees on a farm or estate.

Such surveys later become more frequent. They may specify the number of trees, species and whether timber or pollard. The usual convention is to assign trees to particular fields rather than hedges: we are not told how the surveyor decided to which field to assign the trees in a hedge, or how he avoided counting them twice.

In 1605 James I had a survey made of trees and wood on Crown lands, for he intended to raise money by selling superfluous trees. Trees in woods, parks, commons, Forests, and farmland were numbered and valued; they are entered as 'tymber' or 'decaied'. Decayed trees were presumably pollards: they were of small value per tree and apparently absent from woods, and the sixteenth century, with its slowly-rising price of trees, was hardly a time when large numbers of timber trees would have been allowed to rot through under-use. In 1608-9 there was a further survey of timber on Crown lands suitable for shipbuilding, in order that the Navy, then still his Majesty's private Navy, might be maintained without having to spend money on buying timber. Only the larger trees were included, classified according to the special shapes which each might provide. These surveys, though hasty and unfinished, are extensive and enable woodland and non-woodland trees to be compared.

The earliest pictures of identifiable landscapes, such as Hoefnagel's view of Norwich in 1580, depict hedgerow trees. They appear in vast numbers in almost all the views of English landscapes by the seventeenth-century artists Jan Siberechts, John Kip, and Mathias Read.

Much of the Ancient Countryside in the sixteenth and seventeenth centuries had at least as many hedgerow trees as in 1951 and more than twice what it has now. Many were pollards. James I's 1605 survey shows that pollards often outnumbered timber. On Crown-owned farmland in Essex there were 409 timber and 9121 'decaying' trees; in Hertfordshire the figures were 1110 and 4184.

By the mid-eighteenth century there were more hedgerow trees than ever before or since. At Thorndon timber trees and pollards were sixty times as many as the average for eastern England now - indeed they were thicker on that farmland than in most woodland. This was probably exceptional: the owner remarked on the 'Pollard Trees which this Estate is very much incumbered with & if a great deal more was cut down it would be much better for the Land'.

Such immense numbers are confirmed by landscape artists, who often show hedges astonishingly packed with trees.

Oak, ash, and elm were by far the commonest species. Any of the three could predominate according to no obvious pattern, except that oak, then as now, was most often in the majority on the less clayey soils. Elm was distinctly commoner than in the Middle Ages, but willow and poplar had declined. Oak, elm, ash, and others were pollarded; where pollards were thick on the ground they usually included much elm.

Hedgerow timber shows signs of being preferred for shipbuilding, even though this industry was still only a small user. The 1608-9 survey, limited to oak on Crown estates, records 1623 suitable oaks in Norfolk, Suffolk and Essex. Although there was considerable woodland half these trees were on farmland. Hedgerow trees predominated in large sizes (over 45 cubic feet per tree) and in special shapes for parts of ships such as hooks and knees.

## **Changes After 1750**

The latter eighteenth century saw itself as a time of decline in hedges and hedgerow trees, in consequence of agricultural subsidies, Enclosure Acts, and reorganizing of fields. Grubbing-out

of hedges and trees was reported from eighteen out of thirty-eight counties examined. This source is perhaps prone to exaggeration; but it is supported by John Clare, one of the few literary writers to tell us what the effects of an Enclosure Act looked like at the time. Clare wrote in sorrow and fury at the tidying-up of the medieval landscape of his childhood and the destruction of Langley Bush, Lea Close Oak, and the pollards which had given Helpston its individuality.

The loss of numbers (though not of individuality) was to some extent made up by trees planted in the new hedges of eighteenth-century enclosures; but many later enclosures appear to have had few or no hedgerow trees.

From 1810 to 1860, when the price of oak was unusually high, hedge trees were a valuable source of income, as shown by the accounts of St. John's College, Cambridge. The college sold wood and timber regularly from wooded estates at Thorington (Essex) and Great Bradley (Suffolk), but also, though less frequently, from estates without woodland. In 1838, for example, Thorington produced £ 219, while timber from two woodless estates realized £ 370 and £ 276.

In the late eighteenth century pollarding became unfashionable and new pollards ceased to be formed in most areas, except for willows along water-courses. The reason may have been the growing ascendancy of landlords over tenants. In 1787 St. John's College was complaining that

The ... tenants ... strike off the heads of the young oaks ... and make pollards of them; the heads of the pollards belong to the tenants so that by this means the College Timber and Timberlike trees will all be made pollards of ...

The period 1750-1870 was, on the whole, an age of agricultural prosperity in which hedgerow trees almost certainly decreased. The period 1870-1951 was, on the whole, an age of agricultural adversity, in which there was less money to spend on either maintaining or destroying hedges. Neglect gave innumerable saplings an opportunity to grow into trees. Moreover there was probably less felling of timber than usual between 1860 and 1914. Even the great fellings during

and between the World Wars, and the Elm Disease epidemic of the 1930s, failed to offset the beneficial effects of neglect.

#### **Renewal of Non-Woodland Trees**

Foresters have long known that planted trees, unless sheltered, are slow to grow and difficult to keep alive; a lesson which modern conservationists insist on learning the hard way. Despite this most twentieth-century writers assume that farmland trees are all planted: the philosophy that trees are mere artefacts is strong enough to overcome practical considerations.

Like many misapprehensions, this has some truth. Evidence for planting non-woodland trees is stronger and much earlier than for trees in woods. For example:

In wages of 2 men pulling ashes to plant at Hyndringham and Gateli for 6 days - 2s.

Account roll, Hindolveston (Norfolk), 1312-13

In wages of 1 [man] planting ashes in the manor for  $13\frac{1}{2}$  days at  $1\frac{1}{2}$ d -  $20\frac{1}{4}$ d.

Account roll, Hindringham (Norfolk), 1312-13

In pulling plants of thorn and ash to put on 1 ditch from the south of the manor[-house] to the churchyard, 14 works [i.e. units of labour service].

Account roll, Forncett (Norfolk), 1378

Plants were dug up from local woods and hedges, but there was also a nursery trade; in the fourteenth century plants of elm, hazel, willow, and poplar were articles of commerce. Oak is not mentioned, possibly because it is difficult to transplant satisfactorily.

Despite all this evidence, confirmed as it is by exotic trees in nineteenth-century records and in the landscape today, the case for planting should not be overstated. Trees of hedges are not a random selection from nurserymen's catalogues. Exotic species, including popular garden trees like hybrid lime, are still a minority, but hedges are full of species which are not planters' trees (e.g. maple and many elms). ...

Planted trees, especially oaks, are inevitably at a disadvantage by losing some of their roots in the transplanting. This does not apply to natural saplings and suckers, which grow faster and are not killed by drought. There can be no doubt that, except in new hedges, most hedgerow trees were not planted but promoted from such saplings, which cost nothing and therefore rarely appear in records.

### Non-woodland Trees as they are now

#### Recent decline

In the 1960s many influences conspired against non-woodland trees. Unwonted agricultural prosperity coincided with a lack of confidence in free-standing trees as a crop (due, in large part, to the decline of arrangements for selling them). There was money, some of it public, to spend on either destroying hedges or excessively maintaining them, and both operations were mechanized. Established trees were regarded as a nuisance and destroyed for various reasons or pretexts, such as that they supposedly got in the way of maintaining watercourses. Even worse for young trees was the fashion for tidiness. Hedging and trimming formerly done carefully once in five to ten years were now done hastily every year. A man with a tractor, 'brushing' a ditchbank, could cut off a thousand saplings in an hour without noticing that they were there.

By 1970 conservationists, including many farmers, realized that hedgerow trees were in a bad way, but the cause was disastrously misdiagnosed. The planting mentality had become established and prevailed over the conservation of existing trees. Trees were treated as mere inanimate ornaments with no life or meaning of their own. People were encouraged and financed

to plant trees as a matter of routine, without considering whether it was necessary. Species planted were a random mixture of whatever nurserymen wanted to get rid of. When they died this was put down to bad luck with the weather rather than to the planting itself being inadvisable. Official trumpets were blown for the planting of tens of thousands of trees, but no voice was raised against the destruction of hundreds of thousands of natural saplings.

Most of these factors have operated from time to time in the past; what is unprecedented is their coming all together. Hedgerow trees have usually declined even more than hedges, and field trees more still. This is still not so everywhere. Where agriculture is less prosperous and less mechanized, farmland trees still flourish. Parts of inland Cornwall, with its erstwhile reputation as a rather bleak land, now have a profusion of hedgerow and even field trees, many of them young and still increasing. The same happens anywhere where ancient hedges are a source of saplings and money is not spent on cutting hedges every year. And throughout the country some individual landowners do understand hedgerow trees, mark and protect likely natural saplings, and where they have to plant take trouble to cherish and water the planted saplings.

#### **Pollards**

Pollards have a strong and mysterious geographical distribution. They still exist in thousands in Essex and Suffolk but in other areas there are almost none. I cannot suggest why. If a hedge has pollards, it is almost certainly older than the Enclosure Acts. Most pollards are antiquities; even a quite small bolling can be 400 years old. Usually they are aged between 200 and 600 years, although some giants are older still, and in a few places with a strong tradition new pollards were started in the nineteenth century. Many pollards have not been cut for several decades, although as fuel rises in price this art of managing trees is happily being revived.

The medieval practice of shredding - cropping the side-branches of a tree leaving a tuft at the top-vanished from Britain long ago. Only at Haresfield (Gloucestershire) have I seen a few ancient ashes that may once have been shredded.