

Herefordshire – Preston on Wye

Landscape and agriculture

In 1972 we wrote ‘This is a mixed farming area which, in spite of being farmed fairly intensively, still has a large amount of cover for wildlife and is a good example of classical beauty of the English countryside’. (NAL 72, p.27). It was chosen for its mixed farming in a rolling landscape with a large amount of cover. Mixed farms cover the flat or gently rolling valley floor against a backdrop of valley sides mostly wooded but with a patchwork of small fields (**Fig. 47**). The visitor experiences two scales of enclosure: at the broader scale the valley sides give a sense of place and a confident feel of orientation, whereas at a smaller scale the tall hedges give a strong feeling of enclosure as one winds through the narrow lanes. The well-clothed valley bottom obscures most visual intrusions and buildings are not prominent in the landscape. The River Wye flows through the study area (**Fig. 48**) and salmon fishing has drawn many visitors to the area in the past. Retirement homes are also common in the area, particularly on the valley sides.

The situation in 1972

The major farming type in the area was mixed crops and livestock, with predominantly dairy farming and livestock rearing farms also present. The balance of arable versus grass cropping had hardly changed since the 1920s, let alone 1945. Nearly 60 per cent of the land was in grass, with about a third of it in cereals. Other intensive crops made up the balance, including hops, orchards and root crops: these had reduced in proportion since 1945 with 19 orchards having been removed and only three planted in the period. Cattle were the predominant user of the grass. Family labour was an important feature of management.

The landscape was very diverse, with strong contrasts between the valley and the ridges. Views from the ridge sides provided panoramas across the valley, and from within the valley the treed ridges formed the horizons. Tall roadside hedges regularly obscured the view and there was also much dead ground due to the undulating topography.

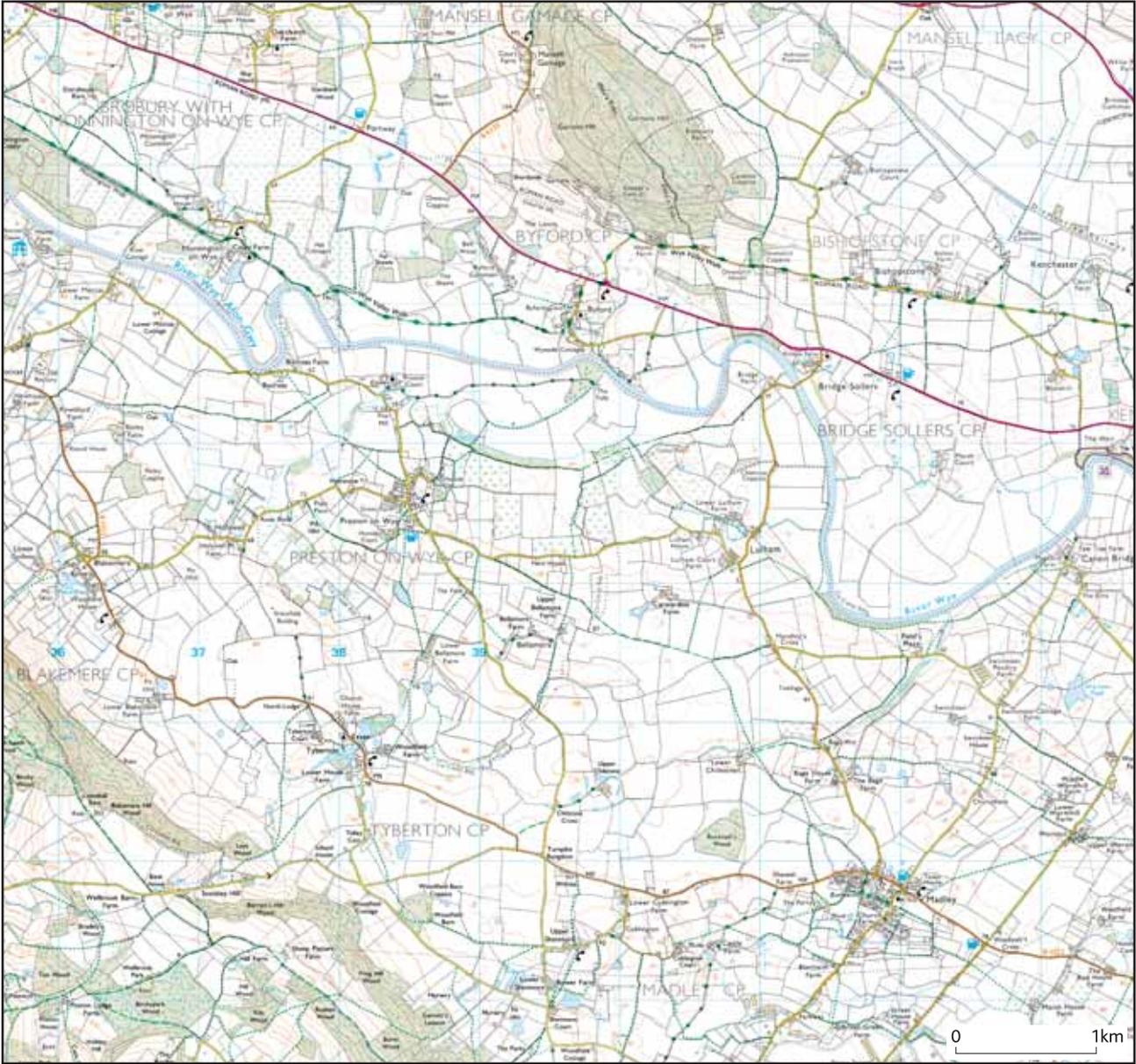
Figure 47: The landscape of this strongly traditional area of mixed farms shows a sharp contrast between the valley sides and the valley floor through which winds the River Wye. A new element in the landscape is polytunnel cultivation of early strawberries.



There had been a 45 per cent increase in field size between 1945 and the 1972 commencement of this study, the third-largest of the study areas. This had resulted from the removal of a very considerable number of hedges (3.2km on one 210-hectare farm, which increased the field size from 4.5 to 9 hectares). Nevertheless, at an average size of 6.5 hectares this was the smallest size of all except the mainly-grassland Somerset and Warwickshire study areas. Despite the scale of removal, this was the area with the highest length per hectare of remaining hedge, more than in the predominantly grassland areas of Somerset and Warwickshire. The profusion of remaining hedges were of high quality, with laying still in evidence, and maintenance produced a wide range of sizes and shapes.

Figure 48: Map of Herefordshire study area and surrounds. The study area is focused on the Wye valley with some views from the neighbouring Golden Valley lying to the south-west.

There had been a relatively small loss of hedgerow trees, about 20 per cent of the 1945 numbers; no doubt a good proportion of these resulted from hedge removal. Oak was the most usual species, but the



replanting was using mainly poplar, some as windbreaks for hop gardens and orchards. Much woodland remained, concentrated on the steeper valley sides and ridge-tops.

Our predictions

In 1972, we predicted that mixed farming would continue in the area and that farmers were 'likely to adapt the traditional enclosure landscape to their new farming systems' (p. 29). But we anticipated that some more specialized farmers might remove all internal hedges, having noted that one cereal-grower had created a 73-hectare field by hedge removal. Our main prediction was for a gradual reduction in the number of hedgerow and parkland trees, and their replacement by trees – mainly conifers and poplars – planted in copses. We also suggested that there would be greater uniformity of hedges as mechanical maintenance became the norm, rather than the rotational laying which had been past practice; and we predicted some low-key continuing hedge removal.

Figure 49: This sequence shows the conversion of a riverside meadow from permanent grass to cereal production between 1983 and 1994, by 2005 looking as though it has always been so. The change was accompanied by the removal of the magnificent tree.



Change 1972–1994

Over this period the proportion of cereal cropping remained stable at about 45 per cent, while permanent pasture reduced from 45 per cent to 26 per cent and other crops, principally root and horticultural crops, expanded to fill the gap. Cattle numbers decreased by about 25 per cent, balanced by a similar increase in sheep numbers. Certainly the area seemed to have become more dependent on arable crops during the interim, with land that had been permanent grass now in arable cropping (Fig. 49).

There was minimal hedge removal over the period, resulting in a minimal increase in field size, but hedges seemed to be of slightly poorer quality. Fewer farmers considered that stockproofness was a prime reason for keeping hedges. 30 per cent of farmland trees had been lost, principally because farmers were not allowing replacements to grow up in the hedgerows.

No woodland had been cleared and a total of 9.3 hectares of mixed woodland, and nearly 8 hectares of poplar plantations, had been planted, the latter specifically for timber for the joinery market. Poplar windbreaks for orchards and hop gardens had been established, with considerable local impact (Fig. 50).

Two ponds had been filled in connection with the expansion of farmsteads, and a low-lying boggy area had been partially filled with rubble. New

buildings had been erected on at least five farms, all closely related to the existing farmsteads. Redundant farm buildings had been converted to residential use, including one whole farmstead.

Change 1994–2005

No further hedgerow removal has been noted since 1994 and the hedges appeared to have improved considerably in quality. The concern expressed in earlier surveys that regular mechanical trimming would gradually weaken hedges has not occurred.

There has been some removal of plantation poplars, presumably deliberate harvesting. One small but significant loss since 1994 has been the death of some of the old pollarded willows at Preston on Wye. It is not clear what killed the trees but evidently most failed to re-sprout after pollarding, which might have been done at the wrong time of year or the new shoots grazed heavily (**Fig 51**). It has not been possible to identify any other significant change in terms of planting or harvesting woodland, but it is likely that some has been carried out.

An old cider apple orchard which had dwindled over the years as trees had died has been gapped up with new trees, possibly with grant

Figure 50: In this sequence, a poplar windbreak has grown up behind the hedge on the left, obscuring the oast houses, a feature of hop-growing areas. Hops are susceptible to wind damage and require shelter.



aid, and other new orchard planting can be seen nearby. An orchard newly planted before 1994 has grown up to obscure the background views (**Fig. 52**). Crop rotations have resulted in more conspicuous change than is the case in many areas with, in one case, the change from orchard trees to wheat to hops over the years (**Fig. 53**).

In 1994 a new set of farm buildings, described as being of impractical design and with an adjacent mobile home, was identified (**Fig. 54**). It is not surprising to find that this new unit now has a new house of superior design (**Fig. 55**), and the fact that it is undertaking bed and breakfast indicates a diversification of the original farming business. There is continuing interest in the conversion of redundant agricultural buildings to residential use, and one former farmhouse, being refurbished for primarily residential use in 1994, has been upgraded by further work and is now the base for a non-agricultural service business (**Fig. 56**).

A major and potentially far-reaching change has been the introduction into the area of polythene tunnels, presumably for strawberry production (**Fig. 47**). Depending on their location in relation to local topography and viewpoints, these reflective structures can attract and hold the attention of the observer.

Figure 52: Cider apples are still a viable crop in the area. This young orchard has grown over the period between 1994 and 2005.

Figure 51: This sequence shows pollarded willows near Preston-on-Wye in an advanced state of decay, reason unknown.



Commentary

The farmers of this study area take full advantage of the opportunities offered by the soils and climate, with vegetables, bulbs, nursery stock and soft fruit all being regularly grown, plus orchards expanding, both for dessert apples and for cider. Despite the intensity of production from arable and horticultural crops, the area retains its character of small fields and large hedges with hedgerow trees. In fact this area has experienced the smallest amount of hedgerow removal of our seven study areas during the course of the study; it has the largest amount of hedge per unit area, and average field size has scarcely changed and is the smallest of all the study areas at 6.5 hectares. In many places there is much more cover than in earlier years, both of hedges and of trees along streams and in small woods (**Fig. 57**).

Thus since 1972 the landscape has changed very little and this area remains an example of a beautiful mixed farming landscape. Although farming has gradually become more intensive there has been very little of the specialisation which has led to the destructive

Figure 53: Changing enterprises from top-fruit in 1983 to cereals in 1994 to hops in 2005 (hop poles are visible in the left of the frame) are evident in this sequence.



Figure 54: A new farming enterprise of questionable economic viability with new buildings and a mobile home suggested a residential planning permission was being sought in the mid-1990s.



Figure 55: The planning application (Figure 54) has been successful and in 2005 a new house offering bed and breakfast has appeared.



change in some other areas, and mixed rotational farming remains the norm. This necessitates a reasonable field size to allow efficient arable cultivations, but this size is now smaller than any other study area. The wide range of crops grown by the farmers of the area makes its own contribution to the interest of the landscape. It is not often that one can see such diversity of cropping, and even less common to see them

being grown in relatively small fields in such a beautiful landscape

Hedge removal has been fairly evenly distributed over the area and has not involved the wholesale removal of hedgerows on individual farms. Hedge removal appears to have been much more considered and was carried out 'to make minor improvements to field shapes and sizes' rather than to give maximum efficiency of machinery operation. It is curious that while the farmers of East Anglia relied heavily on the – genuine – economic arguments for enlarging their fields, the farmers of Herefordshire were content to continue to farm with a significant cost penalty attached to their smaller scales of production. It is clearly associated with the fact that 'many of the (Herefordshire) farmers agreed that this was a beautiful countryside and were keen that it should continue to be so. One even suggested that farmers do have a responsibility to the general public to maintain the countryside in a manner that the public demand'. (NAL94, p 53)

In 1972 we observed that hedges had been laid in the recent past, but have not seen evidence of this subsequently. The recently-laid hedge that we photographed for NAL72 remains thick and vigorous, with varying amounts of growth according to recent trimming history and the date of photography (**Fig. 58**). Indeed, most hedges seem to grow very well and this may be in part be due to the reasonable rainfall of the area allied to the moisture-retentive soils.

The major change taking place, with quite profound long-term significance, is the gradual loss of hedgerow oaks which are not being replaced. There has been a 30 per cent reduction in the number of hedgerow trees between 1972 and 1994, at which time we noted that farmers were neither planting nor allowing volunteer saplings to grow up in hedges, preferring to see trees planted in small woodlands. Therefore there has been a significant change in the character of the landscape already,

Figure 56: This farmhouse over 33 years has changed from agricultural use to a non-agricultural service industry.



which will be an even greater one in the long term, with the further loss of hedgerow trees – especially the oaks – which give the area so much of its character. Saplings in managed hedges tend to be trimmed along with the hedge, preventing development into trees: in part this is due to the presence of utility poles and overhead wires along the hedges, wires and trees being bad neighbours on hedge lines. Indeed, utility poles in the hedges are often accompanied by tall untrimmed hedge growth, which cannot be safely accessed by the trimmer, and will have to be trimmed by hand every few years to prevent interference with the wires.

On the other hand, trees have been planted quite widely, but mostly in small copses and in belts rather than in hedges: and relatively few oaks have been planted. In 1994 this area had as many farmland trees (that is, excluding woods and orchards) as the Somerset and Warwickshire areas, second only to Yorkshire. Whilst woodland planting will maintain lots of trees in the landscape, it will concentrate them into blocks rather than spread them through the hedges across the whole landscape. The farmers of the area seem more knowledgeable and skilful in relation to trees than any of the other study areas, and trees

Figure 57: This sequence shows a landscape on the ridge separating the Wye Valley and the Golden Valley. This landscape features more woodland and smaller fields than in the valleys and the big hedges have tended to get even larger over 33 years.



Figure 58: When we took the first photograph in this full sequence, the hedge at the left had been recently laid and we speculated gloomily that the cessation of hedge-laying might lead to the demise or deterioration of the hedge. Over the years, if anything, the hedge has thickened and flora on the road verge is as rich as ever.

are recognized as a crop in their own right, albeit with a long timescale between planting and harvest. One farmer in the area had set up a business to promote the growing of poplars for quality timber production, on a nationwide basis.

All of the new buildings seen during the course of the study have been erected within or adjacent to the existing farmyards, which has reduced their intrusion into the landscape. Relatively small farm sizes and mixed cropping have meant that the new buildings have not been of large sizes, again reducing any potential negative impacts. Traditional buildings have dark roofs and some modern buildings have used dark



Figure 59: Dark cladding and a background of wooded hills reduce the visual impact of this building.



Figure 60: Even over 33 years the pale clad building in the middle distance is no less prominent, although it will imminently be screened from the road by the hedge in the foreground.



sheeting to reduce intrusion (**Fig. 59**). Although the climate of this area is regularly damp, which should accelerate weathering, modern dense corrugated materials can retain their visual prominence for many years (**Fig. 60**). Clearly it would be preferable for all modern buildings to have darker roofs, a recommendation made by the Design Council in the 1960s¹⁶ but largely ignored since that time.

There remain several old buildings of architectural and/or landscape merit which seem to be candidates for conversion to other uses, and it is surprising to note that they have not yet been converted some 33 years later (**Fig. 61**).

One fine barn in the Golden Valley is now clearly on course for conversion, with a new wooden gate, graveled entrance, and part of the surrounding field uncropped and presumably intended for the garden or as a paddock (**Fig. 62**).

Figure 61: This beautiful barn in Preston-on Wye has not succumbed to residential conversion. Over the 33 years from 1972 to 2005 there has been remarkably little change except the disappearance of the iron park fencing.



Figure 62: The barn in this sequence is clearly earmarked for residential conversion. Signs include a gravel driveway and a new wooden gate (not shown). Otherwise the landscape is remarkably unchanged.



The present and future

Farming has gradually become more intensive in this study area, which is truly a working landscape, lived in by the people who work it, seemingly with little interference. This sentence might be thought to be an introduction that seeks to explain why it has been so greatly altered – ‘the landscape is farming’s factory floor’ – but in fact farming has changed it very little by comparison with other areas. This landscape is substantially unchanged and it has a more ‘traditional countryside’ feel than the other areas studied and is as beautiful as any mixed farming landscape one is likely to find. Just why the farmers of the area are content to work within the existing landscape to a greater extent than many elsewhere is not for this study to investigate, but over the years we have gained the general impression that they are much more

conservative in their approach to farming and landscape – and more knowledgeable about trees – than the general run of farmers in other areas.

It is nevertheless clear that some changes are being imposed on the landscape, and possibly the most far-reaching is the gradual loss of hedgerow oaks and their non-replacement. These magnificent old trees are so characteristic of the area (**Fig. 63**) that their loss will undoubtedly change its appearance quite significantly, albeit over many decades. It was noted in NAL94 that the planning authority had established a special programme to encourage the planting of oaks, but there is no obvious success for this policy within the study area.

There seems no obvious reason why the current trend of substituting small woods for hedgerow trees should not continue into the future, given the local interest in and knowledge of woodland management. It is to be hoped that more native oaks will be planted as part of this management, and special subsidy could be justified to assist in this aim, but there is no certainty that this will be the case.

Highly diverse cropping seems likely to continue to be practiced in the area. Assuming most farmers comply with the basic conservation measures required by the Single Payment Scheme, this may penalise small fields (above the 2ha exemption threshold), in that the cropped margins around the field boundaries occupy a larger proportion of the total land area than is the case with larger fields. However, this would be unlikely to promote large-scale hedge removal, as many, perhaps most, of the

Figure 63: Magnificent hedgerow oaks can still be seen throughout the study area but were once more common. They are rarely replaced when they die or are felled.



hedges will be protected under the Hedgerow Regulations by virtue of their diverse species count. Probably the farmers will simply view the penalty as one more to be accepted to maintain the beauty of the area.

New farm buildings have all been well-sited so far, and again this seems likely to continue. It would be desirable to require dark roofing to limit the intrusion created by modern dense and reflective roofing sheets.

The result of obtaining planning permission for a dwelling on a new agricultural unit was seen in most study areas and this was no exception. There are clear tests laid down in national planning guidance which should prevent the construction of dwellings in all but the most exceptional circumstances, but it is well-known that planning authorities do not always strictly observe this. This is clearly an area of the country where many would pay handsomely to establish a dwelling in unspoilt countryside and farmers could gain considerably from sales of small plots of land at high values. Planning authorities need to be especially vigilant in this regard and it is to be hoped that they will generally succeed in preventing violations of normal rules. The conversion of existing redundant farm buildings, on the other hand, can often achieve added interest in the landscape without compromising its beauty, provided that the work is designed and executed sensitively and with regard to the area's character. It is to be hoped that several of the interesting old buildings seen in this area will indeed be preserved by this means, and the value of planning permissions makes this likely to be achieved. It would be desirable for the planning associated with residential conversion to be informed by design guides to avoid some of the discordant features seen in some areas.

Although this is a strongly traditional area, sporting interests are not an important criterion in shaping the landscape. The area is probably too wet for wild pheasants to thrive in large numbers. Most farmers probably retain the shooting rights and derive less income from syndication than farmers in more arable areas in the eastern half of the country. Informal rough shooting is probably the norm.

Given the qualities of the existing landscape and the attitudes of the farmers, coupled with the control over hedge removal that now exists, this landscape seems likely to continue along similar lines to the existing for the foreseeable future, with the exception of the changes brought about by the loss of hedgerow trees – oaks in particular – and their replacement by cropped woodland. If such change were thought to be undesirable, some measures to modify its progress should be considered. The conservation measures associated with Environmental Stewardship could provide an ideal vehicle for this.

Yorkshire – Myton on Swale

Landscape and agriculture

This study area was chosen to represent a predominantly arable farming area having a strong contrast to the arable areas of Cambridgeshire and Huntingdonshire (**Fig. 64**). Although cropping opportunities seemed similar, much less change seemed to have been made in the landscape. The area lies in the Vale of York, to the east of the river Swale and north of the river Ure, near their confluence (**Fig. 65**). It is an area of low relief with gently rolling landforms. It includes silty soils of the floodplain of the Swale together with blowing sands on the higher areas.

The situation in 1972

Most farms in the area were classified as mixed arable cropping, primarily cereals (50 per cent of agricultural land) with potatoes and sugar beet (15 per cent), and grassland accounting for about 30 per cent. Unusually, in 1970 spring barley was by far the commonest type of cereal grown, a reflection on the generally sandy soils and traditional growing of malting barley for the northern maltsters. The grass was used by dairy cows, beef cattle and sheep. The average farm size was relatively small for an arable area, at 79 hectares, and only 32 per cent of the land was owner-occupied, reflecting the local ownership by traditional estates.

Nearly 15 per cent of the 1945 stock of hedges had been removed by 1972, with a resultant increase in field size from 6 to 7.9 hectares. Most remaining hedges were not in good condition, often thin, gappy and tightly trimmed. Hedges with and without trees formed about 30 per cent of the final horizon. Hedgerow trees had been reduced from 51 per 40 hectares in 1945 to 33 in 1972, and again they were often in relatively poor condition, with over 10 per cent dead and many stag-headed. Oak was the commonest species but replacement saplings of oak were entirely absent.

The estates kept most of the 33 hectares of woodland in-hand and it accounted for 3 per cent of the land area. It was quite important in the

Figure 64: This is a predominantly arable area where changes have not been as sweeping as was anticipated, and the area retains many of the traditional features of the enclosure landscape.

2005



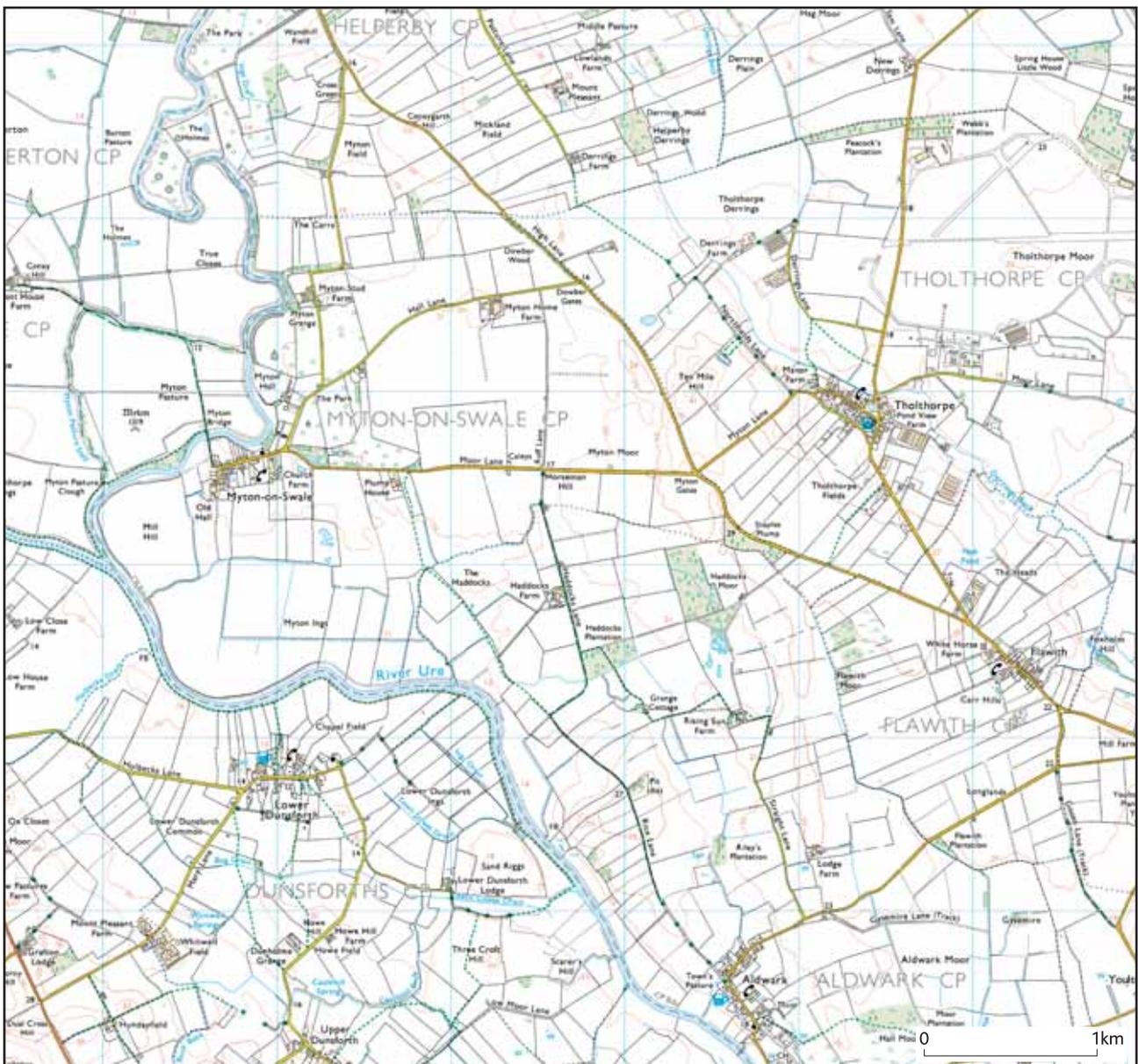
view, as the poor hedges and hedgerow trees did not screen it and it was often located on higher ground.

Most of the farmsteads had substantial traditional buildings to which modern additions had been made. The low relief and poor hedges allowed buildings to be visible over quite large areas.

Our predictions

We considered that there were no farming reasons for the landscape not to become as open and treeless as the major corn-producing East Anglian countryside (though this has not actually happened). We identified a number of factors which appeared to have prevented this happening so far – more traditional and less specialized farming, lower rents for tenant farmers, and the importance attached to visual amenity and game.

Figure 65: Map of Yorkshire study area and surrounds. The landscape in this area is very gently rolling with light sandy soils susceptible to wind blow.



Change 1972–1994

Up to 1983 barley retained its place as the most usual cereal grown, but by 1994 wheat had emerged as the predominant cereal. The grassland area had reduced markedly from 29 per cent to only 15 per cent of the agricultural land, and other crops had increased from only 5 per cent to 11 per cent. Outdoor pig-keeping had come to the area, and intensive pig and poultry units had been constructed in the wider locality. All these changes had brought the area more into line with the cereal-growing areas of East Anglia – economics seemed to be in the ascendant over tradition. Mixed cropping remained the predominant farming type. Average farm size had increased from 79 to 105 hectares by 1980, but had fallen back to 87 hectares by 1990, with the suggestion that medium-sized farms had been split up into smaller units at sale.

A net 7 per cent of the hedges present in 1972 had been removed, resulting in an increase in field size from 7.9 to 9.5 hectares. These removals had been spread across the area, not concentrated on one or two farms. More new hedges had been planted relative to removals than in any other study area; but, whilst hedge quality had seemed to improve by 1983, it had declined again by 1994 and was generally poor – the poorest of all the areas. A few were kept tall for wind erosion control, and one was cut to leave tall shooting butts at regular intervals along it.

Tree numbers stayed constant, and many had been planted in field boundaries, in contrast to some other areas, with oak as the predominant species planted, helping to maintain an important characteristic of the area. Ash volunteers had been common, but these were generally not being allowed to grow on. Trees that were formerly stag-headed were now in better condition and an additional 1.8 hectares of woodland had been planted, mainly by a non-farmer who had purchased land especially for planting. Willows had been planted along the Swale as part of erosion control measures, and one new pond had been dug.

The cast iron balustrade of the bridge over the Swale, leading to Myton Meadows, was falling into disrepair. Myton Meadows, which had been permanent grassland at the outset, had been converted to cereal cropping by 1994. New buildings had been constructed on five farms, and small changes were noticed in a few other cases, none with a significant landscape impact. This included a barn converted for residential use for bed and breakfast accommodation. One farm pond had been filled and an extensive wet area nearby had been drained and converted to arable cropping.

Change 1994–2005

Whilst the farming systems of the area seem basically unchanged, with mixed cropping still the main emphasis, two differences from 1994 are

the cessation of outdoor pig keeping and the conversion to organic production of one of the farms following a change of tenure. Both enterprises are examples of diversification away from the mainstream arable and cattle or sheep, typical of the area. It could be that the outdoor pig enterprise ceased due to a loss of profitability following the foot and mouth outbreak. The organic production does not materially affect the appearance of the area. A pond has been dredged, planted round and stocked with fish for day-fishing, seemingly a diversification effort to increase farm income (**Fig. 66**). Another example of diversification is the establishment of an agricultural hire business operating from a farm.

There have been a number of landscape changes, none very significant. Several trees within fields, formerly in hedges that had themselves been removed in the past, have been felled. The partridge butts, created by the hedge trimming, have gone; some small amount of hedge planting had taken place and occasional trees have been planted. Hedges and trees are generally larger than previously (**Fig. 67**).

Figure 66: This sequence shows a farm pond that has been dredged, stocked with fish and trees planted around it. The farmer lets day-fishing permits.



Figure 67: Landscape changes as shown in this sequence have been few and very selective. Hedgerows appear to be larger and in better condition than in past years but are stressed by low rainfall and droughty soils.

In terms of structures, a new shed and lean-to have been added to an already-extensive set of farm buildings. The historic bridge over the Swale at Myton Meadows has been repaired (**Fig. 68**). An intensive livestock unit has been remodeled and the dwelling rebuilt. The conversion of buildings away from agriculture is apparent in several places. A rural house, in a location suggesting that it had originally been



built in connection with agricultural use, has been extended whilst elsewhere a barn with attached paddock plot is for sale for residential conversion (**Fig. 69**). A farm building has been removed at a former farm, which now seems to be entirely for Bed and Breakfast or holiday lets. The ultimate example is the conversion for residential development of the whole farmstead of a former dairy farm in a village.

Commentary

The farming landscape of this study area was shaped at a time when maintaining soil fertility, weed control and pest control all relied largely on a rotational system that integrated crops and livestock. However the light soils and relatively low rainfall favoured the gradual dominance of arable crops and, as specialization became the norm, we had expected to see farms lose most internal hedges and other features of mixed rotational farming. By 1994 this study area had indeed become a little more consistent with the other arable areas in terms of its cropping.

But wholesale removal of hedgerows and hedgerow trees has not occurred and in fact we saw a small increase in the number of hedgerow trees and a slight improvement in the quality of hedges in spite of a small loss of total length. This trend has continued (**Fig. 70**). Some hedges were so thin in 1972 that we confidently predicted they would soon be gone, but they are still there 33 years later (**Fig. 71**). They seem to owe their continued existence to an innate conservatism, for it is certain that in some parts of the country a farmer with a hedge so gappy and unmanaged would have taken it out and considered that it was a better landscape in consequence. One farmer, viewing the photographs taken 33 years ago, was amazed at how tightly they had been trimmed at that time by comparison with

Figure 68: The first two images of this sequence show the historic bridge across the River Swale at Myton gradually deteriorating, but it has now been fully restored.



Figure 69: This brick barn is for sale with residential planning permission. Presumably when redevelopment occurs the steel truss barns behind it will be demolished.



Figure 70: This full sequence shows few changes and some improvement in the health and size of hedgerows and trees. The farmer of this land is consciously letting his hedges grow bigger and has replanted many gaps.



their sizes today. It might be that a major consideration in allowing hedges to get bigger has been to improve the pheasant shooting, partridge shooting having apparently dwindled in importance. In 1972 it seemed that shooting was a strong motivation for some farmers to retain otherwise-redundant hedges, and the larger hedges may be an extension of this motivation

Trees also seem to have improved over the period. In 1972 many were stag-headed and the accepted wisdom at that time was that they had a restricted life expectancy. The same trees can be recognized today, with better canopies than then, and it is clear that trees can survive several lean years and come back to full health (**Fig. 72**).

Figure 72: In 1972 we observed that many trees were stag headed and predicted an early death for some. But in 1983 the same trees are recognizable, and although by 2005 one tree is missing, all others appear to be in good health.

Figure 71: In 1972 we confidently predicted the imminent demise of the scruffy hedgerow but 33 years later it is still with us, gaps and all. The heap of white material in the foreground is chalk waste to be spread as a liming material.



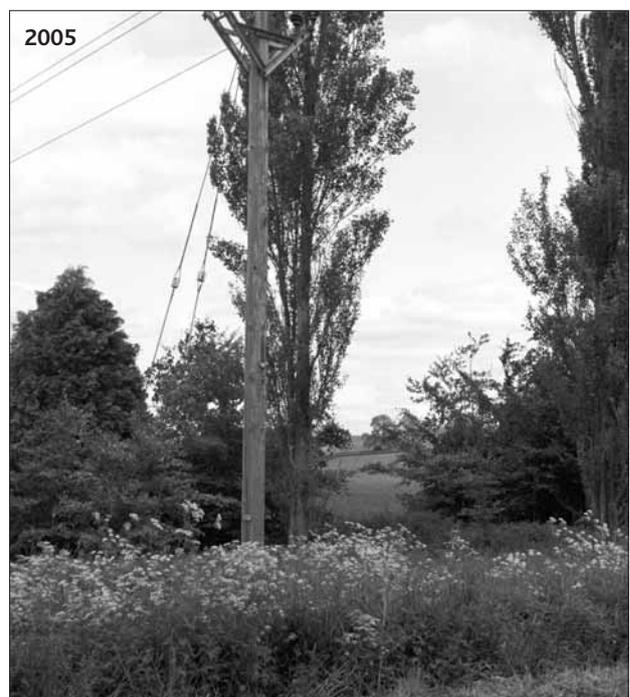
Figure 73: This sequence shows the loss of a few trees from hedges that had previously been removed, but the structure of the landscape remains remarkably unchanged.



Because it is an arable area, and since single trees in arable fields are an enormous inconvenience for modern cultivation practices, there is still pressure for the removal of the single trees which have regularly been left after hedge removal. The sequence (Fig. 73) shows the loss of several trees from old hedge lines, something which can be expected to occur until they are confined to hedges.

It is unfortunate that some of the planting efforts in the early years were less than satisfactory (Fig. 74) but more recent efforts are better and will soon start to have a positive impact. The tree planting undertaken in association with the creation of a fishing pond is particularly successful and will transform this area quite rapidly (Fig. 66). It is interesting to note the woodland planting by a non-farmer for recreational and educational purposes, predating a similar scheme on a larger scale in the Warwickshire study area. If land could be bought more cheaply it is likely that many more such schemes would take place. Such plantings could, however, create problems (real or imagined) for farming neighbours if pest control were not sufficiently rigorous, and with the owner not really troubled by potential crop damage.

Figure 74: Lombardy poplars and conifers are an uncharacteristic feature in this very traditional landscape.



Farm building construction in this area has been close to or within existing farmyards and has not been very obtrusive. The largest building erected has been next to a very large traditional Victorian Home Farm complex of buildings, and could have adversely affected the latter's appearance and setting, but does not seem to have done so. The new building shows a series of developments over the years, demonstrating the inherent flexibility of a modern building of unitary construction (**Fig. 75**). This contrasts with the inflexibility of the adjacent traditional building (**Fig. 76**) and its associated high maintenance cost: it was being extensively re-slatted on the occasion of the 2005 visit, at what must be a considerable cost. A detraction of the new building is the highly variable nature of the vertical sheeting on the upper elevation of the gable, possibly a result of the use of second-hand sheeting – something seen quite widely on buildings throughout the country.

The re-use of farm buildings is commonly seen in the locality. **Fig. 77** shows a former brick-built dairy cow building being converted to residential use, with new-build adjacent on the site of the Dutch barn. We had commented in NAL94 that farms within villages can be bad neighbours and their necessary agricultural development constrained

Figure 75: This series shows an impressive range of brick Victorian farm buildings that have been gradually superseded by more flexible wide-span truss buildings.



Figure 76: Fortunately these Victorian buildings are being re-roofed in slate, in keeping with the local vernacular.



(NAL94 pp. 89-90), and here we see the logical outcome. The traditional building is being carefully converted – even the ventilator openings just below the eaves are being retained as windows – and the new-build has excellent detailing and choice of materials. The conversion at another farm for Bed and Breakfast is perhaps less successful, with its white-painted infill contrasting strongly with the nearby ventilated brick wall. The *Cupressocyparis leylandii* also introduces a suburban note into the countryside (Fig. 78). If the traditional buildings seen in Fig. 79 were to be the subject of conversion to residential use this would present similar challenges, but will at least help to conserve a small part of the traditional structure of this countryside.

The present and future

It appears that conservative farming traditions in the area have moderated the changes in this predominantly arable area. While the economic arguments in favour of large fields are as strong here as in East Anglia, farmers’ own value judgments have limited the changes that they have made. In this respect the farmers share some of the ‘land stewardship, not ownership’ ethics of the Herefordshire farmers. This has occurred at a time of great pressure for change to increase efficiency, supported by the grant and subsidy structure of the Government and European Commission.

Now that the emphasis of grants and subsidies is re-orientated towards conservation of the landscape and wildlife, it seems likely that the destructive changes that have occurred elsewhere will simply never occur here. However, for this outcome to be secure requires the long-term continuation of the pro-conservation measures now in place. Without them, farm incomes will be reduced to a greater degree

Figure 77: In the village of Aldwark, the Dutch barn in the 1994 photograph has been demolished. Now the brick buildings beyond are being converted for residential use and a new house, clearly reflecting local architectural traditions, is under construction on the site of the barn.



Figure 78: Conversion of traditionally windowless barns for residential use is difficult to accomplish without affecting their architectural integrity.



Figure 79: This historically significant range of buildings at Myton on Swale has great potential for residential conversion. If this were undertaken, great sensitivity would be required to achieve an acceptable result.



and economic pressures will continue to force change, irrespective of the inherent preferences of the farmers and their families, though interest in shooting will be of help in this regard.

Relatively small farms growing mainstream crops and animal products simply cannot earn enough to provide a reasonable living. Earnings from non-commercial farming activities – including those obtained from grants and subsidies – will continue to be important. This can be seen in this area, where a pond has been developed for fishing income, bed and breakfast has taken the place of farming, and a small dairy farm is being converted to dwellings.

Provided the opportunities for such income continue, and that agricultural profitability does not completely vanish, the future for the landscape of this area seems much more optimistic than on previous occasions of this study.

Warwickshire – Grandborough

Landscape and agriculture

The area lies west of Daventry and south of Rugby (**Figs. 80 and 81**), an area that in 1972 seemed quite remote and very rural. It was chosen as one of 'heavy clay soils typical of the midland plain' and described as 'The flat or slightly rolling enclosure landscape has large numbers of hedgerow trees, most of which are elms. Gradually receding layers of regularly-spaced elms give the landscape much of its character, which would change entirely were they to be lost' (NAL72, p.35). There were few woods and no steep slopes. Although most farms were still livestock units or mixed enterprises, the area was already experiencing a trend towards more arable crops. A possible loss of hedgerow elms was anticipated, resulting from widespread change to large-scale arable farming as had already occurred in Huntingdonshire.

The situation in 1972

The clay soils with their poor drainage characteristics had always been known as a centre of livestock raising, and in 1972 the major land use in the study area was permanent grass, accounting for 45 per cent of the agricultural land: along with 20 per cent temporary grass, grass was clearly the major crop. Average farm size was 54 hectares and cereals accounted for 30 per cent and other crops 5 per cent. With 65 per cent of the land owner-occupied, most farms were small family-run units, with dairy cattle, beef and sheep all well-represented. The land was noticeably less-intensively farmed than of other study areas.

The hedges varied greatly, from gappy to stockproof, tall to short. Most had numerous mature elms. Photographs of small fields with tall elms surrounding them would have given the impression of a wooded landscape: indeed, one colleague described it as a land where one was always approaching a wood but never arriving at one: this study area, along with that in Cambridgeshire, had the lowest proportion of woodland of all the study areas. The woodland that did exist seemed to have origins as fox coverts. Long-distance views were rare and hedgerow trees formed the horizon to a very much greater extent than

Figure 80: Hedgerow elms once dominated this flat midland plain landscape of heavy clay soils

2005



in other study areas: together with hedges these formed the horizon 92 per cent of the time. Bare ground, growing crops and buildings only accounted for 4 per cent of the final horizon, as did views over one mile.

There were more than double the trees per hectare of any other study area and, unlike other areas, they seemed to have increased in number since 1945, though this may have been an erroneous impression. 80 per cent of the hedgerow trees were elms, and nearly a third of these were saplings. Only seven hedges in the study area contained no hedgerow trees. With some of the elms of massive proportions, clearing them in order to enlarge fields would have been an enormous and costly task.

This study area had experienced the smallest percentage increase in field size since 1945, and its average, at 6.25 hectares was smaller than all other areas except Somerset. It had also lost the smallest percentage

Figure 81: Map of the Warwickshire study area and surrounds. In 1972 the area seemed remote but Rugby lies immediately to the north and Daventry to the east, and today urban pressures are increasingly apparent.



of its 1945 stock of hedges, only 7 per cent. The effect of such a small loss was inconsequential. Of greater significance was the fact that hedge quality was generally very poor, partly a consequence of competition from the elms and partly from the years of 'dog and stick' farming during the depression years of the 30s (see **Fig. 82**, 1st photo).

Figure 82: Between 1972 and 1983 the elm population in the area was completely destroyed by Dutch elm disease and the character of the landscape changed dramatically. Hedge quality was also often poor. A small horse operation now occupies the site.

Ponds had been present in most fields, though where arable conversion had occurred they had been filled. Stream watercourses were often meandering and had received little maintenance. Willows were associated with both features. The high population of trees obscured most buildings from widespread view, and many of the farms were in



and on the edges of villages. Newer types of building were relatively uncommon, reflecting the lack of investment on small livestock farms, the lack of need for grain storage and the high sheep numbers, the latter not requiring buildings except at lambing time and then only in relays.

Thus the landscape had seemingly altered little since 1945, except in those very limited areas where progressive farmers had removed hedges and trees, deepened and cleared the streams, drained the land and converted to cereal production.

Our predictions

We foresaw hedge and elm removal as inevitable, a result of either more intensive livestock production or of conversion to arable cropping. At that stage it was not apparent that Dutch elm disease would become such a dominant factor.

Change 1972–1994

This study area is unique, in that it was not so much the change in agriculture that dictated the changes to the landscape, but the biological changes to the landscape that facilitated agricultural change. The fundamental change was Dutch elm disease, which killed so many of the elms – mature trees, saplings and brushwood (compare top two photos of **Fig. 82**). Dead trees cannot be left standing indefinitely, they have to be cut down and removed. In many hedges, once the trees were gone there was not much left. The major cost of clearance was forced on the farmers and the unthinkable became possible. Along with the loss of elms and hedges went land drainage (including two stream re-alignments) and conversion of pasture to arable. The loss of the elms and associated hedges greatly aided the installation of land drainage, essential to successful arable cropping of these heavy soils.

From 1970 to 1993 the proportion of improved grassland fell from 65 per cent to 42 per cent, with a corresponding increase in arable crops. Thus the area moved partly towards the East Anglian model of arable farming with combinable crops – mainly winter wheat and barley (40 per cent of the land) but also oilseed rape, field beans and peas, and linseed (17 per cent of the land). The proportion of farms classified as cropping doubled over the period, with corresponding falls in dairy and livestock farms. Although average farm size had not changed from 1972, this concealed the fact that the number of medium-sized farms had reduced and of small farms increased, while the large farms had become larger. Two-thirds of the farms were classified as part-time.

During the period 1972–1994 the area lost (net of new plantings) about 12 per cent of its 1945 stock of hedges, perhaps a surprisingly low proportion in view of the practicalities of elm removal. Average field size increased from 6.25 to 9.1 hectares. However, only

Herefordshire had a greater length of hedge per hectare remaining, 147 metres per hectare compared with this area's 109.5 metres per hectare.

In 1972 there were 81 trees per 40 hectares, twice the proportion of Herefordshire, whereas in 1994 this had fallen to 28, the same proportion as Herefordshire and Somerset and slightly less than Yorkshire: and 85 per cent of these were only saplings, with most of those elm suckers which inevitably die after a few years.

Some 2.7 hectares of new woodland had been planted, increasing the existing stock by 70 per cent, but the proportion of woodland remained the lowest of any study area except Cambridgeshire. One pond had been filled. Some of the larger farms had been split up and new units established on smaller areas, giving rise to new sets of buildings. Two new dwellings had been constructed, and units based on keeping horses had arisen.

The consequence of these changes for the landscape was that views opened up across larger un-hedged arable fields, with few trees. These could have been seen as positive developments, in that it is often more interesting to see a variety of short- and long-distance views than all of one sort or the other: and a mixture of arable and grassland is more interesting than almost wholly one or the other. However, the regularly-dying elm saplings coupled with the low relief of the area has tended in practice to reduce the quality and interest of such views.

Change 1994–2005

Except for the details noted below the farming of the area appears to be continuing along basically similar lines to that carried on in 1994.

Only one hedge and one tree could be identified as having been removed since 1994, though this was based on observation rather than detailed analysis. A new wood has been planted under the Countryside Stewardship Scheme, understood to have been by a non-farmer who purchased the land solely for that purpose. A small farmyard has been largely remodeled. Haymaking on roadside verges was not seen this time, and one of the characteristic wide verges has been planted (**Fig. 83**), presumably under the local Council's initiative.

One traditional set of farm buildings has been converted to dwellings (**Fig. 84**) and there has been considerable new residential

development at Grandborough. One farm that had previously been in arable production is now back in grass, with post and rail fencing, looking as though it is no longer a commercial farm business. A large building, formerly used for beef cattle, is now being used – in part at least – as a transport-related depot. A new farmhouse has been built (**Fig. 85**), whilst a new farm building has been erected on a commercial dairy farm.

Figure 83: One of several wide road verges recently planted with young trees. In 1972 these verges were commonly cut for hay.



Commentary

As noted above, the agricultural change in this district appears to have been often a consequence of, rather than a driver of, landscape change. That is not to suppose that some of these agricultural changes would not have occurred in the absence of Dutch elm disease, but the disease probably augmented and brought forward any such implementation.

The greatest change in the character of the landscape has resulted from the loss of all the elms (with some of their associated hedges) apart from the few suckers which routinely reach a few years of age then succumb to disease once more. In consequence the potential for

Figure 84: This full 33 year sequence shows the disappearance of elms between 1972 and 1983 and then the residential conversion of the old barns.



Figure 85: The rationale for planning permission for this new farmhouse was presumably agricultural use.



Figure 86: Elms survive as hedging but if selected to grow up as hedgerow trees they die long before they reach maturity (top). Elm growing as hedgerow plants also die back occasionally (bottom).



views greater than one mile had hugely increased by 1983, though reduced again by 1994 as roadside hedges grew in size.

Although there are no hedgerow elms surviving (unlike in the Huntingdonshire study area where a few still hang on), elm still flourishes in the hedgerows, some of which look thicker and healthier than they did in 1972. This is probably because, after the death of the hedgerow trees, the hedges themselves received more light.

Unfortunately, patches of hedge are susceptible to die-back from the disease once their trunks reach the critical size for renewed beetle attack and if elm saplings are allowed to grow up they are usually dead before they reach 15 feet high (**Fig. 86**). Hedges are also being allowed to grow where previously they were trimmed nearly out of existence (**Fig. 87**).

As the elms died and were removed, hedges too were eliminated. A greater length of hedge per acre was removed between 1972 and 1994 in this study area than in any other, with a consequent proportionate increase in field size – 45 per cent- greater than in any other area. The average field size was 6.25 hectares in 1972, second smallest after Somerset: by 1994 it was 9.1 hectares and larger than both Somerset and Herefordshire.

Another important factor has resulted in a significant change of landscape character. Although the area had seemed so rural in 1972, its location between the urban areas of Rugby and Coventry and within 30 miles of Birmingham and Leicester has made it susceptible to urban pressures and it is beginning to show some of the characteristics of an urban fringe area. In the early 70s it was not very common to find city-dwellers buying a farm as a way of improving their lifestyles, but today it is commonplace. The small average farm size reduces the capital outlay for buying the country retreat. Small farm size also necessitates an increase in part-time farming among those with farming backgrounds in order to attain a reasonable income, and off-farm employment is more easily found close to urban areas.

The popularity of riding has led to a proliferation of small horse operations in the wider area. The dual impact of the loss of elms and of a new horse operation can easily be appreciated (**Fig. 82**). The 2005 panorama shows tree planting on the road verge that previously had been used to make hay and to graze ponies. The low quality of the planting

immediately adjacent to the unit, with a haphazard choice of miscellaneous species and failure to prevent browsing by the horses, emphasizes its incongruity. The features associated with horse operations – post and rail fencing, small paddocks and all sorts of paraphernalia arranged as jumps – change the character of the countryside.

Horses do not necessarily produce poor landscapes, but they can be indicative of a change of lifestyle. Another farm, formerly giving an appearance of commerciality (**Fig. 88**) now seems more likely to be non-commercial and includes a horse paddock at the front. Another, the site of a new dwelling built prior to 1994, originally looked more like a commercial unit than it does now, with its pony in the front paddock. In this respect it may be significant that by 1990 there was an increase in the number of farms smaller than 20 hectares by comparison with 1970, and that by then two-thirds of units were classified as part-time.

The three factors (the loss of elms, the trend towards specialized cereal production, and urban pressures) have not been mutually reinforcing. Urban influences have tended to increase the demand for smaller farms, while specialized cereal production is scale-sensitive and

Figure 87: Isolated buildings, without associated tree planting, are typical of the area, but hedges are being allowed to grow up where previously they have been trimmed close to the ground.



Figure 88: This 33 year sequence shows that in 1972 the pasture was in permanent grass, the site of a mediaeval village with the usual bumps and depressions. By 1983 it had been ploughed with potential archaeological damage and was in arable production as it was also in 1994. However by 2005, the farmhouse appeared to have passed into non-agricultural use and the land returned to pasture, but now enclosed with post and rail fencing presumably for horses.

requires much larger sizes than are common in the area. We had anticipated in 1983 that the loss of elms might have resulted in a major reorganization of the drainage system of the heavy clay land, but the small size of farms (and the task of grubbing the stumps of the huge dead elms) probably militated against this.

The villages in the area have seen a tremendous amount of infill, and there has also been some conversion of farm buildings on the edges of villages for residential use (**Fig. 84**). As with the residential conversion of many old farm buildings, it is the changes to the setting that are most destructive to the character of the building in its location as a



whole, and changes to the fenestration that are most damaging to the integrity of the building itself.

New farm dwellings are more common in this locality than other study areas. One which, we were told, was originally approved as a bungalow but built as a house, was apparently justified on the basis that it was essential for the supervision of a fish hatchery for a local reservoir some distance away. It seems unlikely that this would meet national planning guidelines for new agricultural dwellings in the countryside. Inappropriate planting, especially the ubiquitous Leyland cypress, frequently accompanies new farm dwellings.

Farm buildings are commonly found in isolated positions in the open countryside in this area, as well as clustered at farmyards. These isolated buildings are typically highly functional, and it would help to soften their appearance if tree planting were to be carried out (**Fig. 87**). One particularly gaunt Dutch barn, which looked to be near the end of its useful life in 1983, had some planting associated with it at that time,

but this had been overtaken by more functional needs by 1994 (**Fig. 89**). It is noticeable that the buildings in this area are much more practical than smart. This applies to both the modern factory-made and to those homemade on small farms (**Fig. 90**).

The present and future

The change of farm subsidy system away from production-based payments in favour of conservation-orientated works, together with the inherently low profitability of beef and sheep farming (especially on relatively small farms on difficult soils), will make it unattractive to farm grassland intensively – and possibly at all. The location of this area in what is now effectively an extended urban fringe will increase the likelihood of urban dwellers seeking to buy farms or part-farms, either for their feeling of increased privacy or to treat as large gardens; or possibly to use as a tax-efficient method of maintaining wealth or as low-cost business bases. Arable farms growing the normal run of combinable crops will need to be large in order to achieve the economies of scale needed to make a profit from such cropping. Employment of part-time ‘genuine farmers’ in urban and semi-urban jobs will provide the top-up of farm incomes needed to maintain a reasonable standard of living.

All of these factors suggest an increase in low-key and/or part-time/hobby farming on relatively small

Figure 89: In 1972 this gaunt barn stood in isolation. By 1983 a belt of trees had been planted adjacent to it but possibly the trees caused too much obstruction as they were gone by 2005.



Figure 90: In this area, practicality rules when it comes to farm buildings on farms large and small. In one case, a motorway crash barrier is in use for penning cattle (second from top).



units, orientated more to a desirable lifestyle than towards commercial businesses. There will be increased pressure for new 'agricultural dwellings' in the countryside, and based on past experience too many of these will succeed in seeming to meet the national guidelines when, in fact, they will be basically seeking a pleasant house in the countryside. Too many of them, also, will be likely to add a miscellany

of buildings, fences and general urban clutter to the scene, accompanied by planting more appropriate to an urban area than to the countryside.

Some overall unifying element is needed to give the area a consistency it has lacked since the loss of the elms. A comprehensive scheme to plant willows (to be pollarded periodically) along all ditches in the area would be a start. The now-rather-open landscape is more susceptible to visual intrusions, and the impact of 'clutter' associated with urban fringe areas would be reduced by more small woodlands and belts of trees. There has already been one woodland planted as a result of investment in farmland by someone wishing to create a better environment, and it may be that the grant schemes becoming available will encourage more similar schemes. The outcome of the balance between these competing pressures is impossible to predict, but significant continuing change is likely.