

Chapter 5: Forces for Change

Introduction

- 5.1 It will be apparent from Chapter 2 that evolving patterns of land use have played a major part in shaping the landscape around Leeds over the centuries. This has continued to be the case in the recent period (since the war). Farming, forestry, mining and other industrial activity and the associated and growing needs of settlement, services and communications, continue to influence the landscape.
- 5.2 Change is an essential part of every landscape. In considering proposals for conservation, enhancement and management, the intention is not to 'freeze' the situation at a particular point in time. Rather it is to analyse the forces for change, the effects that they may have on landscape character, and the scope that exists to influence change to ensure that the range and diversity of distinctive landscapes is maintained and their character and quality conserved and enhanced as far as possible.

The nature of change

- 5.3 There have been no comprehensive studies of landscape change in the Leeds area. Recent work by the CPRE in their report 'The Regional Lost Land', draws on a number of sources of statistics on change in land use, and includes a summary of change in the Yorkshire and Humberside region (which includes the Leeds Metropolitan District), which shows that since the war there has been:
- a considerable increase in the extent of urban land;
 - a decline in the extent of farmland;
 - an increase in the extent of woodland;
 - a loss of moorland.

Some of these changes will undoubtedly have affected more local areas, including areas within the countryside around Leeds. However, from our observations and research on landscape change undertaken as part of this study, it would appear that the extent of these changes in the Leeds area, have generally been small in scale. The scope of this research is detailed below.

- 5.4 Given the specific terms and objectives of this study, it has not been possible to carry out a detailed analysis of landscape change in the Leeds area. However we have carried out some work on change in a limited number of small sample areas, selected to cover some of the variation in different types of landscape. This has been based on comparison of aerial photographs from 1971 and 1993, showing change over the last twenty years. The results are shown in Figure 3 and Table 2.
- 5.4 This limited survey suggests that in this twenty year period there has generally been small scale incremental change, though some areas have changed little if not at all. Changes which are apparent can be summarised as:
- some intensification of agricultural use, with loss of hedgerows, or the decline in the condition of field boundaries;
 - some loss of trees;
 - growth and sometimes extension of woodland areas, and maturing of scrub;

- restoration or natural recolonisation of former industrial land to become disturbed land or rough grassland;
- varying types of new development (e.g. expansion of a single farmstead, addition of infill housing, establishment of a garden centre, building of stable blocks in fields, expansion of quarry operations and a scrapyards, and leisure development in the form of a go-kart track).

5.6 In assessing the contemporary forces for change that are influencing the landscape, we have supplemented this survey information with our own observations from our field survey, information contained in the Leeds Countryside Strategy and other documents and comments made by those who responded to our consultation letter.

New development

5.7 At present, pressures for new development probably have the greatest potential to significantly change the landscape around Leeds, although the majority of the area is protected by designation as Green Belt. The main pressures in the countryside and the urban fringe are summarised below.

New housing

5.8 An increasing number of people wish to live in a high quality environment, in the countryside but with good access to their place of work in the city. This creates pressure for housing in villages in the rural area. There is also pressure for peripheral development around the edge of the existing main urban area. In both cases, the buildings and settlements can make an important contribution to the character of the landscape, so inappropriate development can have adverse effects. Many settlements have retained their character, but some have changed significantly. This is partly because the buildings do not reflect local traditions and vernacular styles, but also because of lack of care given to the grouping, arrangement and interrelationship of buildings, roads, open spaces and landscape features. This can have a suburbanising effect on the settlement and the landscape.

Farm development

5.9 As a result of changes in the farming economy there is a trend for farmers to wish to diversify their activities. Such diversification can take many forms but may lead to a requirement for built development, including conversion of farm buildings to accommodate alternative uses, and a requirement for new buildings related to tourism or leisure development. As farmsteads and buildings are often in the open countryside, development of this type can have an adverse effect if very careful attention is not given to matters of siting, design and materials.

5.10 Other forms of development may be needed as a result of normal farming operations. They include:

- (i) **New farm buildings:** which are often large, modern, sometimes almost industrial in scale and character, capable of accommodating large machinery, or intensive livestock units. These buildings are quite different from the smaller more traditional ones which were once more typical of farmsteads. They can be particularly intrusive, especially if insensitively sited in open landscapes. Some buildings require planning permission, but many do not, though there is now a provision for informal consultation with the planning authorities on all buildings.

- (ii) **Houses for essential farm workers:** this is one of the few types of dwelling which might be permitted in the open countryside and they therefore have the potential to bring about significant, though localised change, in the landscape. The main problem is to ensure that the special treatment accorded to such development is not abused and that houses built to house farm workers are used for this purpose.

Road schemes

- 5.11 The construction of new roads and bypasses and the widening or realignment of existing roads can also have a major impact on the character of the rural landscape. New roads cut through existing landscape features, changing the landscape patterns and leading to a loss of hedgerows and trees, which can in turn, further increase the visibility of the road. Major road proposals, such as the new M1/A1 link, will have far reaching implications for areas of urban fringe countryside around East Leeds, both in terms of direct effects on the landscape and in leading to the Unitary Development Plan proposals for housing, economic development and open space provision along the proposed road corridor.

Mineral extraction and waste disposal

- 5.12 Some of the landscape types in the Leeds area are underlain by exploitable mineral resources and have been totally changed as a result of years of mineral extraction and waste disposal activities. In places, such as the Lower Aire, where sand and gravel extraction and opencast coal mining occur, such activities have left a legacy of dereliction and degraded land. Sand and gravel extraction in the Wharfe Valley and stone and clay quarrying throughout the district have also led to landscape change, although to a lesser degree than in the Lower Aire Valley. In terms of implications for the landscape, mineral extraction and opencast mining can seriously affect tracts of agricultural land, changing the land form and causing loss of characteristic landscape features such as hedgerows, mature trees, areas of semi-natural vegetation and historical features. Such effects on the landscape are likely to continue as there is still a demand for sites for the extraction of sandstone, clay, coal and limestone within the area.
- 5.13 Once extraction has ceased there are opportunities for enhancement of the sites through sensitive restoration. In areas which have become derelict and degraded, and where the original character of the landscape has been lost, there are significant opportunities for the creation of new landscapes. However, such restoration does need to be appropriate in the context of the surrounding landscape, as described in this report. Sometimes it is best to restore the landscape to something resembling its character before working, for example, by putting back the field pattern and field boundaries. On other occasions it is possible to create a completely different landscape. In many cases, it may be best to leave nature to take its course, relying on natural regeneration instead of intervention. Whatever approach is adopted, reclamation and environmental enhancement is bringing about significant change in areas such as the Lower Aire and the Wharfe Valleys.
- 5.14 The disposal of domestic, industrial and commercial waste has also had a significant impact on the Leeds landscape in the past. Today, around 98% of all domestic, industrial and commercial waste disposed of within Leeds is disposed of within the area south of a line from Farnley to Micklefield, approximating to the exposed coalfield. Although the pressure for land fill sites for domestic waste could be reduced if steps are taken to meet the government's target of 50% of the recyclable part of domestic waste to be recycled by the year 2000, there will still be a demand for landfill sites for commercial, construction and industrial waste. This continuing demand for suitable sites will have implications for the landscape of Leeds, particularly if the level of the landform is raised through waste tipping.

Agriculture and land management

- 5.15 Throughout the country, major agricultural changes have taken place since the 1940's as farmers have been encouraged to increase agricultural production. This led to expansion of the area under cultivation by using technological advances, such as fertilisers and drainage, to increase yields and by increasing field size and the scale of farm operations to exploit economies of scale. Such changes have occurred in the Leeds area, particularly to the east of the city where there is arable farming and the agricultural land quality is higher. However, in the last twenty years it seems likely that the rate of change has slowed though, as our sample survey shows, hedges and woodland have still been lost in this period.
- 5.16 Some of the more obvious changes which have resulted have included the amalgamation of fields to create larger areas better suited to modern machinery. This has resulted in the pattern of fields, hedges and hedgerow trees being weakened and fragmented, with the isolated trees and low-cut gappy hedges that remain contributing to an appearance of decline in the landscape. In the northern and western areas of the district, some loss of drystone walls has also taken place, and although the field pattern has remained largely intact, many walls are now in a State of disrepair and are in need of re-building or replacement. Loss of field boundaries has also resulted from changing agricultural practices and the need to reduce costs. Hedgerows for example are redundant in arable areas and are often left to deteriorate, to become overgrown or gappy. Often the response has been to replace hedges with simple wire fences which can have adverse effects on the pattern of fields and on the character of the landscape.
- 5.17 Farming in the urban fringe of a major city such as Leeds is subject to particular pressures due to its close proximity to the urban area. Problems of trespass, vandalism, arson and theft are typical in many areas, and in the grassland and stock farming areas to the north and west problems arise from gates being left open, allowing animals to stray, and from uncontrolled dogs worrying sheep and disturbing cattle. Such problems, combined with pressures for development, use of land for recreation and fragmentation of farm holdings, can make land in the urban fringe un-viable and difficult to farm economically. There are many responses to these pressures including agricultural diversification, use of land for recreational activity, creation of woodland or the keeping of horses. Some of these activities can have serious implications for landscape character. For example, the expansion of recreational horse grazing and horse keeping can result in the proliferation of unsightly stables, shelters and loose boxes. This, combined with a gradual deterioration in the quality of grazing due to poor management and the poor upkeep of field boundaries, can all have a detrimental effect on the landscape.
- 5.18 In the last decade, a number of factors have resulted in a move towards more environmentally sensitive farming practices and hence the reversal of some of the more adverse changes. The European Community's Common Agricultural Policy (CAP) has led to over production in some sectors of agriculture, and reviews have led to a series of measures designed to reduce the level of such surpluses. Farmers have been encouraged to set-aside land by the payment of incentives and the most recent reforms have introduced a new regime which requires farmers to compulsorily set-aside 15% of their arable land on a rotational basis, which could soon begin to have some effect on the appearance of the landscape.
- 5.19 Set-aside is usually temporary and farmers are not given encouragement to pursue additional landscape or conservation measures on this land. A new, non-rotational set-aside option has also been introduced which allows the land to be managed in a number of environmentally beneficial ways (including field margins and strips, natural regeneration, wild bird cover, and other specialised management such as regeneration of scrub and woodland). There may also be a provision for extra payment to allow access to certain types of non-rotational set-aside land.

5.20 Along with the recognition that there is no longer a need for ever increasing food production, there has also been increasing acceptance of the need to reverse the damaging effects of agricultural intensification on the environment. At the same time, the need to maintain the farmer's income has been recognised, and as a result a number of schemes have been established to provide financial incentives for environmentally sensitive farming. The Ministry of Agriculture, Fisheries and Foods (MAFF) scheme for Environmentally Sensitive Areas does not apply anywhere in the Leeds area, but schemes run by other agencies are relevant, and could soon begin to have some effect on the appearance of the landscape. One notable scheme is the Countryside Stewardship Scheme introduced by the Countryside Commission in 1991, which provides incentives for farmers to manage land in environmentally beneficial ways.

The Scheme offers payments to restore characteristic features to the landscape by managing land in a traditional way or re-creating certain habitats. It is targeted at specific landscape types namely waterside, chalk and limestone grassland, lowland heath, uplands, historic landscapes, and old orchards. In the Leeds area there are currently five sites covering in total about one hundred hectares of land (source: Countryside Commission), which have been entered into the scheme. Three have been entered into the waterside tier, and two have been entered into the chalk and limestone grassland tier. Four of these sites are located within or close to the Lower Aire Valley, which, along with the River Calder, has been designated as a priority target area for Stewardship. The other site lies outside this target area, at Harewood.

5.21 Another Countryside Commission scheme is the Hedgerow Incentive Scheme, which provides financial incentives for beneficial hedgerow management. Currently only one site in the Leeds area, at Scarcroft, has been entered into the scheme although a further three are currently proposed. The northern belt from Otley through to Eccup and the area around Drighlington have been identified as target areas for the scheme within the district.

5.22 Schemes such as Countryside Stewardship and the Hedgerow Incentive Scheme have the potential to reverse some of the adverse effects of earlier agricultural intensification and begin to enhance the landscape by helping to retain and restore some of the characteristic features of the landscape, helping to prevent the further loss of hedgerows and encouraging more sensitive management of the land.

Trees and woodlands

5.23 Woods and trees are an important element in the landscape around Leeds, being particularly noticeable in the north of the district, on the Chevin and throughout the parklands of the eastern limestone belt. However, as mentioned in Chapter 3, woodland cover amounts to 2,650 hectares, just under 5% of the total area of 552 square km, as compared to a national average of below 10% and a European average of 25%. There appear to be no statistics about recent changes in woodland cover in the Leeds district, although it would appear that little, if any, woodland is being lost at present, particularly following the Government's Broadleaved Woodland Policy introduced in 1985 which has given particularly strong protection to broadleaved woodland. Historically change has resulted from the economic pressure to convert broadleaved woodland to more productive conifers, but this too is much less common now. Some field and hedgerow trees have disappeared over the years as a result of changes in farming and pressures of development.

5.24 There is active woodland management on private estates such as Bramham and Harewood and also by the City Council in its own woodland, such as the Otley Chevin, Gledhow Valley Woods, Bramley Fall Woods, Middleton Woods and on the Temple Newsam Estate. Changes in the management of existing woodland are happening as a result of changes to tax and grant incentives.

These have included the development of the Woodland Grant Scheme and Farm Woodland Premium Scheme, where special payments are made for managing woodland as well as for new planting.

- 5.25 One of the most significant of the changes in policy is the move away from the focus upon timber production to the emphasis on the creation of multi-functional forests, as reflected in the Department of the Environment's Circular 27/92 "Indicative Forestry Strategies". In line with this, the City Council has recently prepared a Woodland Strategy, as part of an overall vision for the future of Leeds, a key aim of which is to promote a framework for the development and management of woodlands which have a multi-functional role.

The strategy introduced the concept of a 'Forest of Leeds' initiative which seeks to provide a new focus for woodland planning and management around the city. It is initially focused upon the South Leeds area because of the urban fringe issues prevalent there and because of the low level of existing woodland cover. There is likely to be some new planting in the Leeds area as a result of grant schemes to encourage this. Such planting should benefit the area provided that it complements the existing landscape character and avoids damage to historical or ecological features. Many landscapes around Leeds would benefit from increased tree planting, and areas such as the arable fringe farmland around the south of Leeds could accommodate quite substantial amounts of new planting without detriment to their character. Conversely some areas would be unsuited to large scale woodland planting.

Tourism and recreation

- 5.26 One of the greatest pressures on the landscape in recent years has resulted from growing demand for leisure, tourism and recreation activities. These pressures are particularly acute in countryside areas close to centres of population, such as those in or around the fringes of the city. It is likely that these pressures, both for formal, informal and unauthorised use of the countryside for recreation, are likely to continue. In accommodating these activities within the countryside, there are both conflicts and opportunities. Conflicts can exist due to the competing demands for land for agriculture, leisure, recreation and other users within the countryside. They can also exist between and within differing leisure and recreational pursuits, thereby placing considerable demands upon the countryside resource. At the same time, however, recreational activities can provide a positive practical means of diversifying agriculture and the rural economy, improving the accessibility of the countryside and providing opportunities to enhance the landscape.
- 5.27 Most development related to tourism and recreation is relatively small in scale and has only localised effects on the landscape. However, like many other areas of Britain, Leeds has experienced significant pressure for golf course development, with a total of some one hundred applications having been received in recent years for new courses around the city. A number of new courses have already been built, bringing considerable change to previously agricultural landscapes. The nature and significance of the impact varies according to the location and nature of the scheme, but in inappropriate locations and with poor design, golf courses can often appear out of place in the surrounding landscape. Short mown grass on greens and fairways and white sand bunkers appear as alien features and courses often disrupt the scale and grain of farmed landscape. On the other hand where the structure of the landscape has become fragmented, for example in urban fringe locations, there may be more suitable areas for new courses than in the wider countryside. Applications need therefore to be considered on their individual merits.
- 5.28 Golf courses and other recreation facilities often also require a range of associated facilities such as flood lighting, bars, club houses and changing rooms. These can bring further change to rural landscapes and can lead to pressures for expansion, change of use or additional supporting development, all of which can further change the landscape.

5.29 It is likely, that in the future, opportunities will be sought for maximising the potential of the urban fringe for recreation, both for formal uses such as golf courses and for other informal recreational pursuits. The Leeds Countryside Strategy, for example, identifies the need for this, along with the promotion of the recreational use of areas of water, riverside and their tributaries, enhancement and promotion of the multifunctional use of woodlands, and enhancement of the Public Rights of Way network.

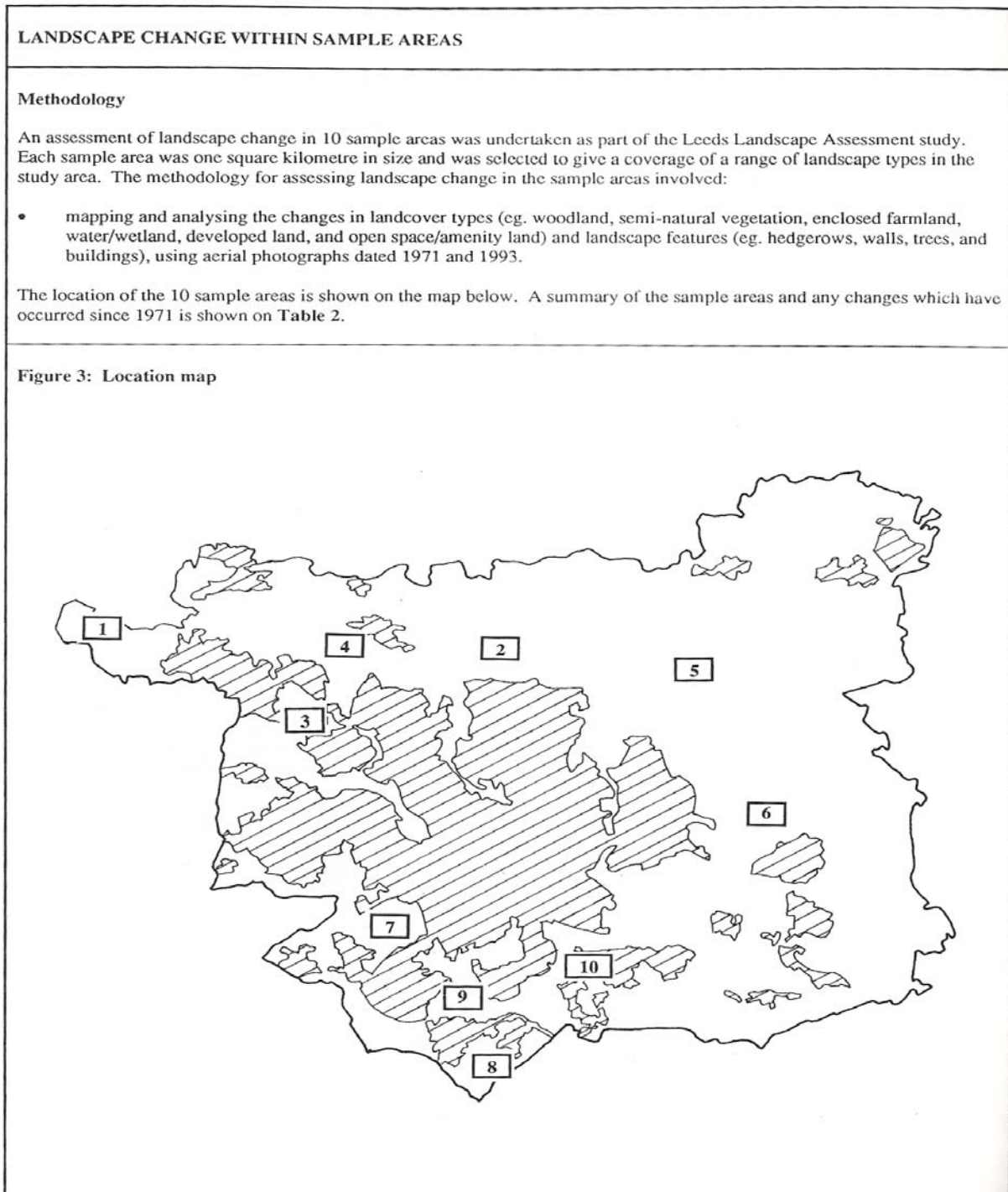


Table 2: Summary of landscape change in sample areas

SAMPLE AREA	NAME	LANDSCAPE TYPE	GENERAL DESCRIPTION	SUMMARY OF CHANGES SINCE 1971
1	Hawksworth Moor	Gritstone moorland	This sample area lies in a transitional area containing open moorland, rough grazing and areas of more improved pasture, as well as part of a reservoir and associated buildings.	There have been few changes since 1971, apart from the expansion of the reservoir buildings.
2	Eccup	Pastoral plateau farmland	This sample area is almost exclusively open ley grassland, in large fields, with visually weak internal boundaries. The main structural elements are the lanes and the woodland edges of Eccup reservoir	There has been little change since 1971, although the already poor boundaries have declined further and some have been removed. The only built development has been an expansion of the farmstead.
3	Horsforth	Pastoral plateau farmland	This sample area lies in a belt of pastoral land separating the built areas of Yeadon and Horsforth. Most of the fields are enclosed by drystone walls, with many lines of trees. There are significant areas of woodland along a beck and within a crematorium.	There has been a small two-way transfer between arable and pasture, but generally the land use has been relatively static. The walls have maintained their pattern, but some of the trees have been lost. Expansion of the urban area has been confined to a recent small area of infill housing.
4	Bramhope Beck	Wooded plateau edge valleys	This sample area includes two valleys dominated by woodland lying along the becks, flanked by regular, walled grass fields. There is a mix of pastoral and arable farmland. Roads are lined by walls and some trees	Since 1971, there has been a general increase in the density of existing woodlands and a more intensive use of the areas of rough grassland adjacent to them. There has been a net transfer of arable land to ley grassland. The developed land has expanded in a piecemeal fashion, with the creation of a garden centre and several stable blocks in fields.
5	Scarcroft Hall	Small scale farmed ridges and valleys	This agricultural area is broken up by development strung out along the lanes and by the disused railway. There are approx. equal areas of arable and grassland. The grassland has a strong hedge/woodland edge structure whilst the arable land is larger scale and more open.	There has been little significant change in the sample area. However, a small increase in the arable area, some degradation in boundary features and the maturing of areas of semi-natural scrub and woodland has occurred.
6	Barnbow Common	Open arable farmland	Much of the sample area is arable, with some improved grassland but there is a significant area of amenity grassland which includes a sports ground and part of a golf course. Woodland occurs along the edge of the golf course and along streams.	The land use within this area has not changed significantly since 1971. However, there has been an expansion of the improved grassland areas. The maturation of woodland and scrubby areas, some on former disturbed land has also occurred
7	Farnley Woodside	Pastoral fringe farmland	The sample area is almost exclusively medium sized pastoral fields, with some arable and horticulture and only small areas of developed land. Other than along the beck, there are few trees and only a few good hedgerows.	There has been little change to the agricultural use, with only a small loss of Horticultural land to grassland. There have been adjustments to the farmsteads and other developed land, but little net change.
8	Ardley Reservoir	Arable fringe farmland	The sample area is predominantly arable, with some horticulture, but broken up by development strung out along the lanes. Field boundaries are hedgerows and fences. Ardley Reservoir and mineral extraction activities are also in evidence.	There has been significant hedgerow loss in the area, and a trend towards intensification of land use, with an increase in horticulture and improved grassland. Quarry operations have also expanded.
9	East Morley	Arable fringe farmland	Area of generally large arable fields with some pasture and scrub and rough grassland along streams and railway line. Pockets of residential and industrial development occur, including a scrapyards.	There has been considerable hedgerow and tree loss and although the balance between arable and grassland areas has remained consistent, there has been a significant two-way change. Maturation of scrub and woodland has occurred. The scrapyards has expanded and a new 'go-kart' track has been built.
ID	Wakefield Road	Arable fringe farmland	This sample area is predominantly open horticultural and arable fields, with patchy industrial and residential development and areas of derelict land along the main road. Most of the field boundaries are insubstantial or have been lost altogether.	Several areas of industrial development present in 1971 have now closed, to be replaced by disturbed/derelict land and areas of rough grassland. There has been a general intensification of land use, with some further hedgerow loss.