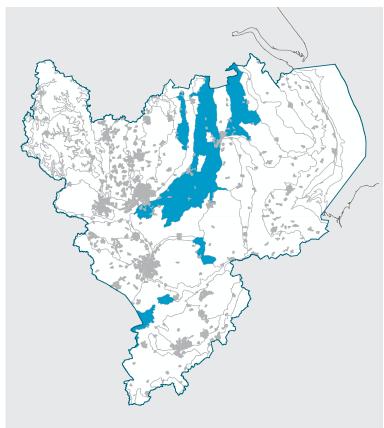


Gently undulating landform is characteristic of the Lowland Vales ($\mathop{\circledcirc}$ LDA Design LLP)

4A: UNWOODED VALES



Flat, open landscape with expansive views (© LDA Design LLP)



KEY CHARACTERISTICS

- Extensive, low lying rural landscape underlain by Triassic and Jurassic mudstones and clays and widespread superficial deposits;
- Expansive long distance and panoramic views from higher ground at the margin of the vales gives a sense of visual containment;
- Low hills and ridges gain visual prominence in an otherwise gently undulating landscape;
- Complex drainage patterns of watercourses that flow within shallow undulations often flanked by pasture and riparian habitats;
- Limited woodland cover; shelter belts and hedgerow trees gain greater visual significance and habitat value as a result;
- Productive arable and pastoral farmland, with evidence of increasing reversion to arable cropping in recent times;
- Regular pattern of medium sized fields enclosed by low and generally well maintained hedgerows and ditches in low lying areas; large modern fieldscapes evident in areas of arable reversion; and
- Sparsely settled with small villages and dispersed farms linked by quiet rural lanes.

LANDSCAPE CHARACTER

The rural Unwooded Vales Landscape Character Type within a central area of the region on a broadly north south axis, and whilst various underlying bedrock geologies exert a local influence, superficial deposits create a softly undulating landscape and consistent and recognisable character.

The Vales generally have a strong sense of place, with major landform features flanking the lower lying areas creating broad scale visual containment. Within the vales, low hills and ridges are also important, foreshortening views and creating subtle relief features.

The vale landscape is generally characterised by productive mixed agriculture, set within an enclosed landscape of low, well maintained hedgerows. Wide areas are under permanent pasture, often grazed by dairy herds. However, areas of pasture are increasingly being ploughed up for cereals and hedgerows removed to accommodate large machines. Rivers and streams are also an important landscape feature. Whilst these occupy shallow folds and are not immediately apparent in views, their courses can often be observed by tracing sinuous belts of riparian habitat and riverside trees.



Unwooded Vales (© Carol Paterson, Natural England)

The vast majority of the Vales retain a deeply rural and tranquil character, with farms and small nucleated villages located throughout areas of productive farmland, linked by narrow winding lanes and roads. Despite low levels of woodland cover, local landform, hedgerows and shelter belts create visual containment and give the Vales landscape an intimate character. By contrast, panoramic views are possible from elevated locations albeit contained by rising land at the edges of the Vales.

PHYSICAL INFLUENCES

The Unwooded Vales of the East Midlands are closely associated with the broad belts of Triassic and Jurassic mudstones and clays that run northwards through the region. Whilst local variations in the bedrock exist, these rock formations generally give rise to a low, gently undulating landform. Occasionally hills and ridges rise out of the vales, marking the watersheds between watercourses draining through the vales. These elevated areas are often capped by villages or trees emphasising their visual prominence.

Variations in the underlying bedrock are masked by the extensive glacial deposits of till, together with alluvium, sand and gravel and solifluction deposits (head). These deposits further soften landform features and exert a strong influence on soils and therefore patterns of agricultural land use.

Drainage patterns throughout the vales are complex, with a multitude of rivers and stream channels draining neighbouring uplands to join the region's main river systems. Watercourses, often bordered by narrow alluvial floodplains, wind through the landscape along shallow valleys, appearing little more than gentle folds in the landscape. Indeed, these watercourses are often not discernible in the landscape and only become evident by tracing alder and willow trees, and sinuous belts of riparian habitat or rushy pastures.

The varied geological framework of bedrock and glacial deposits has a significant influence in the distribution of various soils types in the Unwooded Vales; loamy, peaty, clayey and sandy soils are all in evidence across the landscape. Free draining soils are not typical although a small area of shallow lime-rich soils is evident on the ooidal limestone north of Lincoln. Generally, therefore, the vales landscape contains soils with impeded drainage and naturally wet soils along the belts of alluvium bordering streams.

The series of quarries associated with the past and present extraction of mudstones and gypsum offers some potential the application of practices for the care, maintenance and management of features of geodiversity interest and the promotion of their educational and interpretational interest. Some of the abandoned quarries may have potential for geoconservation by re-exposing the geology.

Despite improvement and drainage creating a greater unity in the agricultural capacity of the vales landscape, local variations in soils continue to have an influence on patterns of agricultural land use. The Unwooded Vales are generally characterised by a mixed farming regime; many areas are well suited to pasture farming, and indeed large areas of the vales are evident as improved pasture for dairy cattle. Permanent pastures are typical along the alluvial belts bordering stream channels, where ranker and rushy pastures are common. Cereal and vegetable cropping is widespread and in some areas hedgerow removal has created some very large fields, often under a single crop.

In this long settled and productive agricultural landscape there are typically low levels of woodland cover and very low levels of surviving ancient woodland. Despite this, the landscape appears well treed, largely on account of ground level views across wide areas encompassing hedgerows and well established, moderately sized, game coverts, mixed plantations and shelter belts. Whilst not common, hedgerow trees, notably oak and ash, are also important both to provide shelter and to add to the overall treed character of the landscape.

Similar to the low retention of woodland cover, the landscape has retained little semi natural habitat, reflected in the low occurrence of areas designated for their nature conservation value. Indeed, it is interesting to note that many of the key biodiversity assets, such as Rutland Water, Grantham Canal and sand and gravel pits at Whisby are artificial. In such a managed agricultural environment, networks of hedgerows and hedgerow trees gain significance in offering a refuge for birds and insects.

CULTURAL INFLUENCES

It is not unreasonable to assume that the vales were settled and exploited throughout prehistory. However, the clay soils are not particularly suited to displaying crop-marks, and the rural landscape has not been extensively surveyed by archaeologists, and as such there is little evidence to create an accurate picture of pre-historic land uses.

Roman evidence is more widespread with several Roman towns located within or fringing the vales. Several Roman roads, such as the Fosse Way, Great North Road and Watling Street, pass through the Unwooded Vales, indicating that these gentle and low lying areas provided convenient routes through the hills and wetlands.

It is to the late Saxon period that the existing dispersed pattern of nucleated settlements can largely be traced; place name evidence suggesting settlement by both Saxon and Norse communities. Building on a much more dispersed pattern of settlement the mid to late Saxon period saw the establishment and consolidation of the vales villages. These tend to be nucleated around a central church, and located at the junction of two or more roads that wind through the landscape. Many villages are located on spinal routes that pass along watersheds and raised landform running between rivers and streams. The roads and watercourses combine to give a subtle grain to the landscape, although this is interrupted by the numerous 'cross routes'.

As communities grew, so did the villages, and much of the vales landscape was brought into cultivation. During the medieval period some settlements, such as Market Harborough, were gaining status, and developed as centres of commerce and trade serving their rural hinterland. Remnants of the medieval agricultural economy can be found throughout the vales landscape. The ridges and furrows of the open fields are widespread, preserved beneath areas of pasture.

In some areas, the conversion of open fields to enclosed grazing occurred as early as the Tudor period. However, enclosure of much of the Unwooded Vales landscape occurred in the late 18th and early 19th century, with surveyors setting out regular fields bounded by hedgerows. Many hedgerows were laid out in geometric patterns, although much older hedges are evident, often as sinuous belts of trees and shrubs, perhaps defining parish boundaries and older field systems into which the straight enclosure boundaries were established. The period also saw other improvements to agricultural land with enhanced drainage and the straightening of watercourses. Farms were also established in the new field systems.

The rebuilding of many villages in the vales also took place in this period. The use of clay brick and tile roofs was widespread, and many older timber framed cottages were encased in more durable materials, or demolished altogether.

In recent decades, the productivity of the land has stimulated widespread change in the rural landscape. Large areas of permanent grassland have been ploughed up, leading to some areas with a predominance of arable, some of which appears as vast areas of monoculture. The enclosure landscape has been modified by the removal of hedgerows and ditches so that fields can better accommodate large scale machinery. In many instances the only clues to former field patterns are remnants of low grass banks within ploughed fields.

The flat and open character of the Unwooded Vales made the landscape ideal for the development of wartime airfields, and there are a number of redundant airfields still present.

AESTHETIC AND PERCEPTUAL QUALITIES

The Unwooded Vales is a simple and unified landscape type, consisting of a limited palette of features and elements, principally comprising, permanent pastures alongside watercourses; productive mixed farmland within a planned pattern of hedged and ditched enclosures; and nucleated villages and dispersed farmsteads linked by narrow winding lanes and more direct arterial routes.

Whilst the landform of the Unwooded Vales is typically low and subdued, rising landform towards their fringes creates a sense of visual containment. In the broader vales, this is sometimes difficult to discern; however, glimpses of neighbouring elevated areas are often sufficient to provide a strong sense of place. Within the broad vales, and typically along river and stream valleys, more intimate and human scale areas can be discerned. These 'sub-vales' generally follow river valleys with their outer limits defined by low hills and ridges along watersheds.



Unwooded Vales (© Carol Paterson, Natural England)

The soft and gently undulating landscape and low levels of woodland cover creates a relatively open and expansive landscape. Wide panoramic views are possible from the low hills and ridges that form watersheds between watercourses. However, a more intimate character prevails in lower lying areas, particularly where intact hedgerow networks or belts of riverside trees truncate views. The Unwooded Vales landscape character type is also perceived as being relatively sparsely settled, with villages, hamlets and farms widely distributed throughout the rural landscape. These are often relatively small and nucleated, with surrounding belts of trees integrating them into their landscape setting, the skyline often only being punctuated by the church spire or tower which can be seen from some distance away.

The Unwooded Vales Landscape Character Type has a strong agricultural character, with wide areas retaining a sense of rural tranquillity. This is particularly evident where the vale landscape is intact, with farmland interspersed with small villages and hamlets.

LANDSCAPE CHANGE AND MANAGEMENT

BUILT DEVELOPMENT

Forces for Change

The majority of new built development is located on the fringes of the larger settlements of Nottingham, the southern fringe of which lies in the Unwooded Vale, and Lincoln and Newark-on-Trent, all of which are identified in the Regional Spatial Strategy as growth points to receive significant levels of growth. However, many of the rural villages have not seen widespread expansion. Development pressure continues today, with demand for housing, commerce and industry creating visual intrusion and extending the urban fringe.

Shaping the Future Landscape

The aim should be to manage growth, ensuring development is appropriate in terms of type, scale and location. Best practice innovative architectural ideas and planning solutions should be employed to minimise impact on local landscape and townscape character and the planting of new trees and woodland around urban fringes should be encouraged, helping to integrate new large scale mixed use development into the landscape. For development associated with the rural villages, specific mechanisms include Village Design Statements, and tree planting around settlement fringes to help integrate new development into the landscape and ensure the appropriate use of vernacular styles and building materials. As well as Village and Town Design Statements, Conservation Area Appraisals can also be important tools.

INFRASTRUCTURE

Forces for Change

The flat, open landscape of the Unwooded Vales contains several airfields. While redundant airfields provide an opportunity for new housing or employment uses, this reduces tranquillity and the sense of remoteness in sparsely settled areas.

The construction of new roads or road alteration schemes has the potential to significantly affect the landscape with implications for change in character. The significant impact of the A46 widening scheme is a demonstration of this process and the effect on the wider countryside.

Shaping the Future Landscape

The aim should be to manage redundant airfields, ensuring development is appropriate in terms of type, scale and location and provision is made for new landscape features. In addition, it may be appropriate to retain existing infrastructure, providing an historic link with those that had a wartime role.

New road schemes, as well as widening or realignment of existing roads should ensure that they are carefully integrated into the landscape through sensitive attention to alignment, detailing and planting where appropriate.

AGRICULTURE AND LAND MANAGEMENT

Forces for Change

The most widespread change has been agricultural intensification and the change from pastoral to arable cropping. This has resulted in the loss of hedges, and consequently, an increase in field size. Although the remaining hedgerow network is generally strong, there is nevertheless evidence of decline in a number of areas, with gaps and few hedgerow trees. The loss of pasture is particularly evident around settlements, where grazing animals and smaller field sizes contribute to the setting and structure of several villages. Watercourses are also an important feature of the landscape, although often indiscernible.

Shaping the Future Landscape

The aim should be to protect existing rural landscape features, whilst encouraging positive management of those features lost or under threat. In particular, the restoration of hedgerows should be given priority where there is evidence of decline. The creation of new hedgerows and permanent pasture along watercourses should also be a priority, enhancing the visibility of streams and dykes, whilst increasing the occurrence of semi-natural habitats.

FORESTRY AND WOODLAND

Forces for Change

Woodland does not form a significant component of this landscape, and considering its open and expansive character, extensive new woodland planting would be generally inappropriate. However, limited tree planting could be used in and around settlements to integrate new development into the landscape and in more intimate low-lying areas to help create a mixed pattern of land-use, increase the occurrence of semi-natural habitats and maintain the perception of a 'well treed' landscape.

Shaping the Future Landscape

The aim should be to plan new tree planting around key settlements and other suitable locations. Trees should be typically grouped in small plantations/copses or as individual trees within hedgerows. Such proposals should be undertaken in collaboration with the Forestry Commission and local landowners, and financial support may be available through the English Woodland Grant Scheme.