

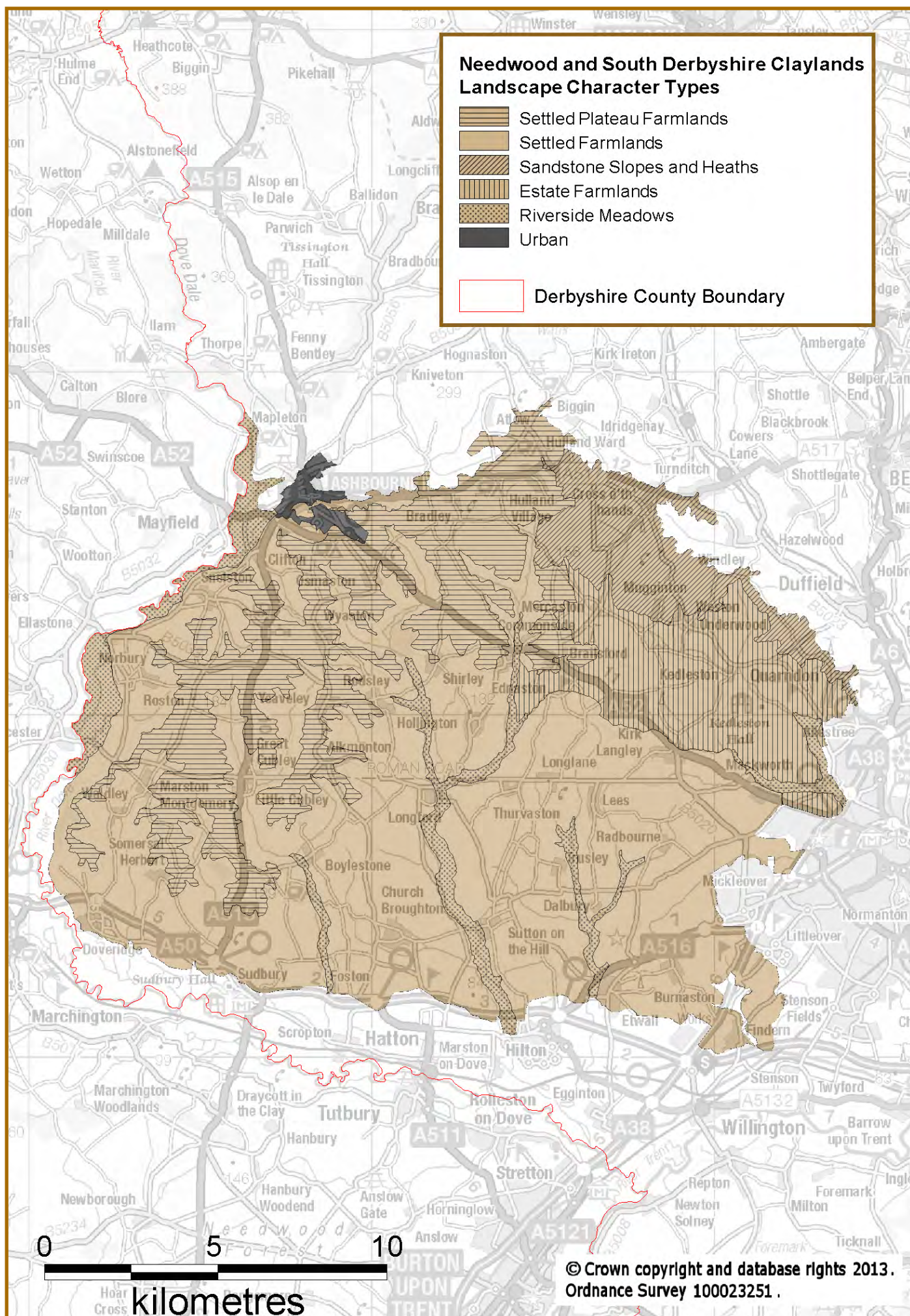
## Part One: Landscape Character Descriptions

# 6. Needwood and South Derbyshire Claylands



### Landscape Character Types

- Settled Plateau Farmlands ..... 6.4
- Settled Farmlands ..... 6.8
- Sandstone Slopes and Heaths .. 6.13
- Estate Farmlands ..... 6.17
- Riverside Meadows ..... 6.22



# Needwood and South Derbyshire Claylands

## CHARACTER AREA 68

A settled, pastoral landscape on gently rolling lowlands.

### Landscape Character Types

- Settled Plateau Farmlands
- Settled Farmlands
- Sandstone Slopes and Heaths
- Estate Farmlands
- Riverside Meadows

*"... and where at every turn he came upon some fine old country-seat nestled in the valley or crowning the slopes, some homestead with its long length of barn and its cluster of golden ricks, some grey steeple looking out from a pretty confusion of trees.... And directly below them the eye rested on a more advanced line of hanging woods, divided by bright patches of pasture or furrowed crops..."*

(p16 George Eliot 'Adam Bede')

### Introduction

Located in the south-west of the county, the Needwood and South Derbyshire Claylands comprise two distinct areas separated by the River Dove, which also forms the administrative boundary between Derbyshire and Staffordshire. The distinctive wooded landscape of Needwood lies exclusively within Staffordshire.

The remainder of this Character Area within Derbyshire is rolling lowland over glacial till and Mercia Mudstones that were amenable to early settlement and farming. In contrast to the Needwood area, there is less woodland and more settlement with small villages and scattered farmsteads and cottages. Ridge and furrow and the earthworks of deserted villages suggest the area was once more densely settled.

Land-use is typically dairy farming with some arable, set within a framework of hedgerows and mature hedgerow trees. Woodlands are few but locally occurring parkland, such as that at Kedleston Hall, makes a significant contribution to the overall character of the area.

Small red brick villages and estate farms are distinctive features and, although some settlements west of

Derby have expanded through post-war development, the landscape retains a deeply rural character.

### Physical Influences

Within Derbyshire, this character area is defined by an underlying geology of Mercia Mudstones, with Sherwood Sandstone to the north, overlain in the north and west by a thin covering of glacial drift. Differential erosion by numerous narrow streams, draining from the Peak Fringe, has created a gently undulating to rolling landform with the glacial drift defining the more upstanding *Settled Plateau Farmlands*.

The wide valley and *Riverside Meadows* of the River Dove define

the western and southern limits of this area within the county.

### Natural Influences

The predominant land-use is pasture, mainly for dairy farming, with some arable cropping where topography allows, particularly in *Settled Plateau Pastures*. Within Derbyshire, unlike the Needwood area, woodland is not a prominent characteristic, although there is a strong sense of enclosure pertaining to the patchwork of fields enclosed by hedgerows with mature hedgerow trees. Although much of the pasture has now been improved, there are still remnants of unimproved pasture and meadows. Some older hedgerows are species-rich.



Where the underlying geology is defined by sandstone in *Sandstone Slopes and Heaths*, locally occurring heathland with gorse and heather is still to be found, though mostly confined to the steepest slopes or road verges.

Historic parks, like Kedleston, make a locally significant contribution to the ecological value of *Estate Farmlands* through the presence of veteran parkland trees and the presence of plantation woodland.

## Human Influences

Evidence of early activity is generally rare. However, Iron Age and Roman settlement suggest the area was more extensively settled in the pre-medieval period than previously believed.

The agricultural quality of the land would always have attracted settlers and the present pattern of settlement was established in the Anglo-Saxon period, as indicated by the place name evidence and the number of villages already present by the time of the Domesday Book.

Following the Norman Conquest, extensive tracts of land were set aside for royal hunting forests. Duffield Frith is a good example extending over a large area and encompassing a number of deer parks including those at Mansell and Ravensdale Park near Muggington. Park pale (bank and ditch enclosure boundary), earthen bank gateways, deer courses and other historic landscape features survive to give these former park landscapes a distinctive character. They also incorporate remaining fragments of heathland, particularly within *Sandstone Slopes and Heaths* at the northern extremity of the area.

In the *Settled Farmlands*, the density of settlement in the Middle Ages was greater than it is today, as indicated by the surviving earthworks of deserted and shrunken villages, such as Hungry Bentley and Muggington, and the

surviving ridge and furrow of the former open fields. Settlement also spread onto commons and heaths in the late post-medieval period, most notably at Hulland Ward with its typical wayside cottages and straight roads.

Enclosure of the landscape began early and areas were already enclosed by the early 17th century. The winding and often sunken country lanes bounded by plump mixed species hedgerows are, in part, a product of the long history of enclosure and add to the rural character and sense of antiquity on this landscape. In contrast, within the former commons and heathland associated with *Settled Plateau Farmlands* and *Sandstone Slopes and Heaths*, roads are often straight and direct with uniform width verges.

Later, country house parks were developed at Osmaston, Sudbury and most notably at Kedleston. Kedleston Hall, set within the *Estate Farmlands* landscape, remains today as one of the finest examples of a Georgian set-piece, the hall and park both being designed by Robert Adam.

The predominant building material within the villages is red brick and, with the exception of villages like Brailsford, they have remained relatively small and loose-knit in character. More important buildings, like churches and the manor house, may be constructed in the local sandstone. Some very occasional examples survive of half-timbered Elizabethan buildings, most notably Somersal Herbert Hall.

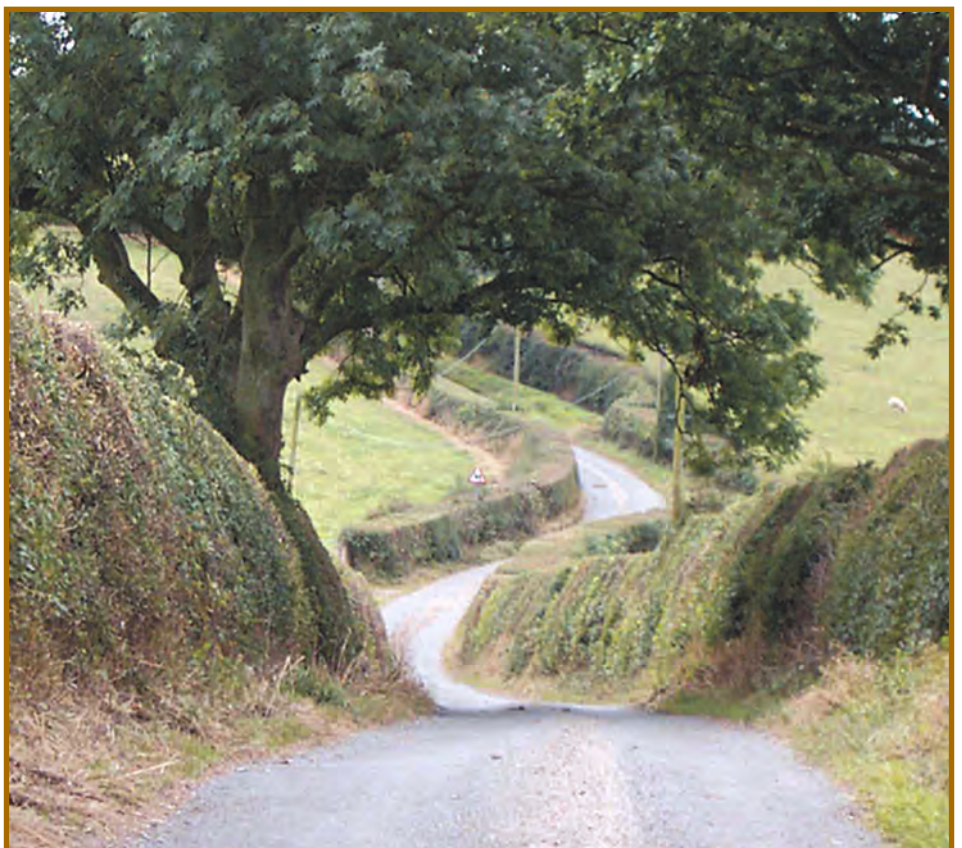


Somersal Herbert Hall

Winding country lanes bounded by hedgerows provide a sense of enclosure, particularly where the lanes have become sunken within the minor valley sides.

## Other Considerations

- The Lowland Derbyshire BAP

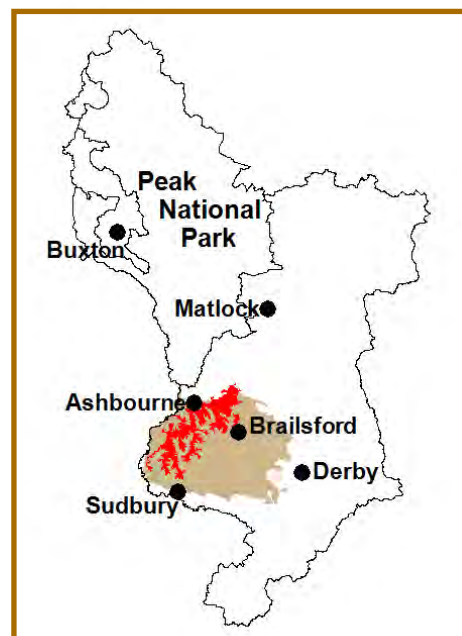


Winding country lane

# Needwood and South Derbyshire Claylands

## LANDSCAPE TYPE: SETTLED PLATEAU FARMLANDS

A medium scale pastoral landscape on gently rolling upland plateaux. A sense of elevation with extensive views filtered by scattered hedgerow trees and small woodlands.



### Key Characteristics

- A gently rolling upland plateau extending onto ridge tops
- Slowly permeable, seasonally waterlogged soils over glacial till
- Pastoral farming with some cropping
- Marl pits forming small ponds
- Densely scattered boundary trees and occasional small woodland blocks
- Small to medium fields surrounded by hedgerows
- Parkland estates
- Areas of former common land with clusters of red brick and Staffordshire blue clay tile roofed cottages
- Scattered red brick and Staffordshire blue clay tile roofed farmsteads and estate farms
- Extensive views over lower ground

### Geology and Landform

This plateau landscape is strongly influenced by the underlying geology with reddish till (glacial drift) overlaying Palaeozoic and Mesozoic Sandstone and Shales for the most part. This occurs as a series of "fingers" or narrow ridges extending southwards from the higher plateau between the gentle valleys of the Spinneyford Brook, Wyaston Brook and Cubley Brook.

### Soils and Land-Use

The soils found consistently

throughout this landscape are slowly permeable, seasonally waterlogged, fine loam over clayey soils. The gentle relief associated with this landscape type ensures that there is little run-off, so the slowly permeable soils are waterlogged for long periods in the winter and are then inaccessible to stock and machinery.

This is moderately good mixed farmland although dairying and improved grassland and leys dominate. Autumn sown crops of wheat, barley and oil-seed rape are found throughout this type, but principally in the Bradley and Shirley

Common/Brailsford areas in the east.

### Ecology

Much of this landscape type is intensively farmed as permanent pasture or for cereals. The improved grassland and cultivated fields have little ecological interest. Where drainage is impeded, patches of wet grassland with rushes occur. Small fragments of degraded rush communities are found in damp patches and hollows.

Terrestrial corridors in the form of hedgerows and small blocks of broadleaved woodland persist but these are declining due to agricultural intensification and field amalgamation, most noticeably in the Shirley Common/Brailsford areas.

Where the underlying sandstone is closer to the surface, there are significant patches of bracken in hedgerows and along road verges. The network of lanes around Bradley is particularly rich in bracken.

The many marl pits support valuable base-rich wetland communities. Older pastures, particularly if poorly

drained, can develop a distinctive base-rich association. At Hulland Moss, a SSSI, there is an important example of lowland bog and heath with areas of dry oak and wet alder woodland.

## Tree Cover

Boundary trees are scattered throughout giving filtered views, often over extensive areas. Occasional small blocks of broadleaved woodland and shelter groups are found.

The predominant tree species are oak and ash but there is also some sycamore. Remnant parkland blocks can be identified in some areas, most notably at Osmaston Park, with its double avenue of mature elm trees.

## Enclosure

This is a landscape of generally medium sized, semi-regular fields, although the size and pattern has significant local variation as a result of the diverse history of enclosure. This varies from narrow, curving strip fields to the regular, almost geometric shapes resulting from the late enclosure of common lands as seen at Shirley Common. Former commons occur frequently in this type and the names are still retained, such as Snelston Common, Roston Common and Shirley Common.

Several pockets of very small irregular shaped fields still survive. A good example is the intricate fields pattern at Hole in the Wall near

Yeldersley but there is also evidence of early enclosure of open fields at Bradley, Offcote and Underwood.



*Irregular field patterns*

The cultural pattern is generally intact here but is declining in the areas of regular shaped fields as a result of modern farming practice.

Fields are enclosed by hedgerows which can be species-rich in areas of earliest enclosure, with holly, hazel and field maple, to predominantly hawthorn in areas of late parliamentary enclosure.

## Transport

The strong ridgelines characterising this landscape have been utilised for transport and there is a fairly dense network of country lanes. Former turnpike roads like the A52 and A517 took advantage of this higher ground. Many of the roads follow the ridgelines, tending to be straight and direct, especially where they cross former commons. Where roads cross former wasteland, names like Moor Lane, near Osmaston, reflect past character. In areas of early enclosure, where lanes are more curved, road verges are of irregular width, as opposed to the wider, more uniform width verges on former commons. Many footpaths link settlements and dispersed farmsteads.

Two large military airfields were established in the 1940s, to the south of Ashbourne. Both are now used for alternative purposes. The cultural pattern of this area has been obliterated as a consequence of the removal of all field boundaries, small woodlands, the diversion of lanes and the levelling of ground on a large scale.

## Built Environment

This is a landscape of widely scattered farmsteads and small settlements. The villages which are found on this landscape type, such as Bradley, Shirley, Yeaveley, Alkington and Wyaston, were originally very small nucleated settlements surrounded by open fields, mainly originating in the medieval period.

Elsewhere, dispersed common-side cottages can be found, typically with long, narrow gardens running parallel to the lanes and formed from the enclosure of wide verges.

Almost without exception, traditional buildings are built of mellow red brick with Staffordshire blue clay tile roofs.

Many settlements have grown in recent years with much unsympathetic suburban style housing, some in the form of ribbon development. Osmaston by contrast is an attractive, unspoilt estate village, with several thatched and rustic properties in the picturesque style of the early Victorian period.

## Summary

A landscape shaped by its underlying geology of glacial drift over sandstone and shale, creating a landform of narrow, upland plateaux. Long distance views are limited by trees that are found scattered throughout most hedgerows. However, with incisions of lower lying land, there is a distinct sense of elevation.

Soils over glacial till are heavy and seasonally waterlogged, lending themselves to good quality pastures for dairy farming but the gently rolling landform ensures that the land-use is more mixed, with autumn-sown crops like barley and wheat.

The settlement pattern is a key feature. Although not densely populated, there is a general scattering of farmsteads with the occasional small village, like Bradley, Yeaveley and Wyaston, with their origins in the medieval period or earlier. The traditional buildings are typically built in brick with Staffordshire blue clay tile roofs.

### Planting and Management Guidelines

A gently undulating pastoral landscape of very little woodland but densely scattered hedgerow trees.

Primary woodland character:	Thinly scattered small plantations
Primary tree character:	Densely scattered hedgerow trees
Woodland vision:	Thinly scattered small plantations
Tree vision:	Densely scattered hedgerow trees

Typical woodland size range:	0.5 - 5ha	small
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Woodland pattern:	Regular plantations
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- Ensure the use of indigenous tree and shrub species, including a proportion of large, long-lived species.
- Ensure the management and enhancement of hedgerow trees, through selection and natural regeneration, or by planting.
- Ensure the conservation and management of mature/ veteran trees within hedgerows.
- Ensure new woodland does not conflict with features (e.g. ridge and furrow) that help to define landscape character.

# Needwood and South Derbyshire Claylands

## LANDSCAPE TYPE: SETTLED PLATEAU FARMLANDS

### Woodland Species Mix

#### Neutral/ More Acidic Soils

##### Primary Tree Species 50%

<i>Acer campestre</i>	Field Maple
<i>Fraxinus excelsior</i>	Ash
<i>Quercus robur</i>	Pedunculate Oak

##### Secondary Tree Species 20%

###### Major

<i>Betula pendula</i>	Silver Birch
<i>Malus sylvestris</i>	Crab Apple

###### Minor

<i>Populus tremula</i>	Aspen
<i>Prunus avium</i>	Wild Cherry
<i>Prunus padus</i>	Bird Cherry
<i>Salix cinerea</i>	Grey Willow
<i>Sorbus aucuparia</i>	Rowan
<i>Taxus baccata</i>	Yew

##### Shrubs 10-30%

###### Major

<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn

###### Minor

<i>Cornus sanguinea</i>	Dogwood
<i>Lonicera periclymenum</i>	Honeysuckle
<i>Prunus spinosa</i>	Blackthorn
<i>Rhamnus cathartica</i>	Purging Buckthorn
<i>Rosa canina</i>	Dog Rose
<i>Viburnum opulus</i>	Guelder Rose

##### Open space 0-20%

### Hedgerow Species Mix

#### Suitable hedgerow plants

##### Primary 70-75%

<i>Crataegus monogyna</i>	Hawthorn
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##### Secondary 25-30%

<i>Acer campestre</i>	Field Maple
<i>Corylus avellana</i>	Hazel
<i>Ilex aquifolium</i>	Holly
<i>Prunus spinosa</i>	Blackthorn

##### Occasional 0-5%

<i>Cornus sanguinea</i>	Dogwood
<i>Lonicera periclymenum</i>	Honeysuckle
<i>Rhamnus cathartica</i>	Purging Buckthorn
<i>Rosa canina</i>	Dog Rose
<i>Viburnum opulus</i>	Guelder Rose

#### Suitable hedgerow trees

##### Primary 70-75%

<i>Fraxinus excelsior</i>	Ash
<i>Quercus robur</i>	Pedunculate Oak

##### Secondary 25-30%

<i>Acer campestre</i>	Field Maple
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##### Occasional 0-5%\*

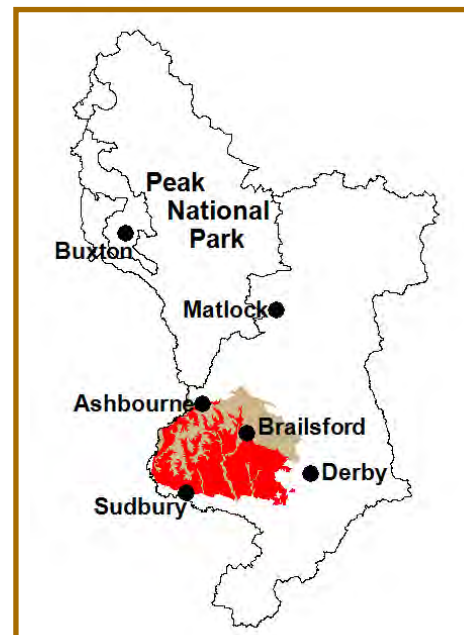
<i>Malus sylvestris</i>	Crab Apple
<i>Prunus avium</i>	Wild Cherry
<i>Prunus padus</i>	Bird Cherry
<i>Sorbus aucuparia</i>	Rowan

\* only to be used if occurring locally within the landscape character type

# Needwood and South Derbyshire Claylands

## LANDSCAPE TYPE: SETTLED FARMLANDS

An undulating to gently rolling, dairy farming landscape with hedgerow trees, dense watercourse trees and occasional small woodlands. A well-settled landscape of red brick farmsteads and cottages along winding country lanes.



### Key Characteristics

- Gently undulating to rolling lowland dissected by minor stream valleys with localised steep slopes
- Seasonally waterlogged soils over Permo-Triassic Mudstone, Siltstone and Sandstone
- Dairy farming on permanent pasture with localised arable cropping
- Small woodland blocks and copses associated with steeper slopes
- Scattered oak and ash trees along hedgerows
- Dense lines of trees along streams
- Small to medium size, semi-regular and strip fields enclosed by hedgerows
- Extensive ridge and furrow
- Network of winding lanes often sunken on steeper slopes
- Small clusters of red brick and Staffordshire blue clay tile farms and cottages

susceptible to short periods of waterlogging, making them difficult to cultivate and prone to poaching by livestock. Where the slopes are locally steep over sandstone, the soils are coarse loams and silts, and free-draining.

The land-use is predominantly dairying and stock rearing on improved permanent pasture and leys. There is some arable farming where the local topography and soil conditions dictate, particularly around Shirley, Brailsford and Somersal Herbert. Indeed, this is amongst some of the finest agricultural land found in the county being officially classified Grade 2.

### Geology and Landform

The underlying geology of Permo-Triassic Mudstone, Siltstone and Sandstone and occasional Carboniferous Sandstone creates a broadly undulating to gently rolling lowland landscape. Where sandstone defines the eastern flank of the Dove Valley, the ground rises steeply to form a distinct escarpment before gradually falling away to the east, forming a series of

incised valleys. The landform becomes ever more gentle and subdued towards the Trent Valley in the south.

### Soils and Land-Use

As with much of the lowland Midlands, the soils are consistently reddish, fine loamy or silty over clay, with slowly permeable subsoils. The slow permeability of the subsoils makes them

### Ecology

Much of this landscape is intensively farmed either as improved permanent pasture or arable cropping. As a result, much is of little ecological value. However, there are isolated patches of unimproved grassland and hay meadow, associated with small family farms and steeper slopes, which provide local floristic interest.

Terrestrial corridors are important with many well-managed, mixed species hedgerows. Hedgerow trees, predominantly oak and ash, add ecological interest.



*Well-managed mixed species hedgerow*

These terrestrial corridors are supplemented by a network of watercourses, fringed by dense lines of riparian trees. There are patches of rush pasture associated with the stream corridors, most notably at Mercaston Marsh, a designated SSSI.

On the steeper slopes in the west, there is more woodland, some of which is of ancient origin. Parkland, such as that at Snelston, provides additional ecological benefit with its many mature specimen trees and occasional small game coverts. The value of small plantation woodlands is often limited by the presence of coniferous species.

On the steepest slopes over sandstone, there are heathy associations, with bracken occasionally found in the hedgerows and road verges.

## Tree Cover

The fertile soils and intensive agriculture associated with this landscape type ensure that woodland is poorly represented. Exceptions to this rule are interlocking woodlands like Eaton Wood and Bradley Wood, that follow the steeper slopes of the Dove and Henmore Valleys, creating a distinct wooded edge. Both woodlands are rare examples of ancient semi-natural woodland with oak and ash.

Despite the lack of woodland, tree cover is well represented

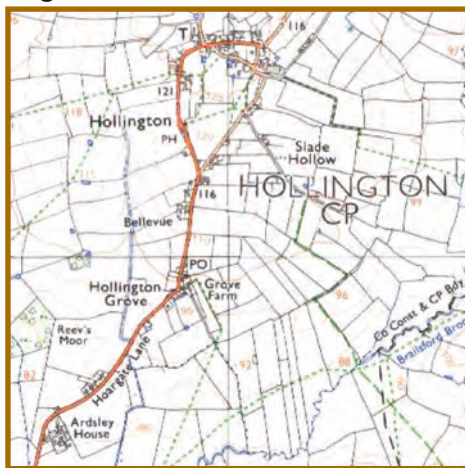
throughout, due to the densely scattered hedgerow and watercourse trees. Collectively, these trees filter views through the landscape and, at lower elevations north of the Trent Valley, they create a strong sense of enclosure with more restricted views.

The well-treed character is further supplemented by localised parkland with its mature specimen trees and small mixed species game coverts. At Longford Park there are several small plantations and game coverts.

## Enclosure

This is a landscape of predominantly small to medium sized, semi-regular fields enclosed by hedgerows, although the field size and pattern varies locally, reflecting the diverse history of enclosure. This cultural pattern remains essentially intact although there has been some field amalgamation in areas of arable farming.

Several examples of strip fields enclosed from former open fields survive, most notably in Hollington and Boylestone parishes, where fields display evidence of medieval ridge and furrow.



*Fossilised strip fields associated with the nearby village of Hollington*

Many hedgerows contain a good variety of species indicating age and maturity. These include holly, hazel, blackthorn, dog rose and hawthorn.

## Transport

There is a dense network of winding lanes throughout this landscape, often with irregular width verges. In some areas, the network is so dense and intricate there is a choice of routes available between settlements. On the steeper slopes around Norbury and Snelston, lanes are very narrow and often sunken.

Adjacent to the Dove Valley, many routes run parallel to the river corridor, taking advantage of the natural gradients. In the south, lanes travel due north from the Trent Valley. The line of the former Ashbourne to Uttoxeter railway can clearly be seen following the edge of the flood plain to the River Dove and marking the western limits of this landscape type.

A former Roman road connecting Derby (Derventio) to Rocester is followed by the modern Long Lane, though this deviates from the original route at Alkmonton to follow an easier gradient.

There are many footpaths and green lanes connecting the small settlements and scattered farmstead.

## Built Environment

This is a well settled but sparsely populated landscape containing small villages, isolated groups of roadside cottages and scattered farmsteads. Villages tend to be small, like Somersal Herbert and Marston Montgomery, and some loose knit, such as Roston and Norbury on the eastern flanks of the Dove. Many of the villages have their origins in the medieval period. Some have shrunk in size since the Middle Ages and are characterised by the earthworks of former crofts and tofts, such as at Thurstaston. Others have disappeared altogether and remain only as earthworks, leaving only single farms such as Hungry Bentley.

The predominant building material is a warm red brick with Staffordshire blue clay tiles. Some local reddish sandstone is also used, usually for more important buildings like the parish church and manor houses. A few timber framed buildings survive although these are no longer a prominent feature of the area.

Snelston has its own particular character, being the estate village of the former Stanton Hall, with a number of cottages and estate buildings in the picturesque style.

Most of the villages have grown very little, though modern infill development has modified their original loose knit character. Modern suburban development has been largely restricted to the outskirts of Ashbourne and Clifton.

Due to the intensive nature of the farming regime and the large size of some farms, bulky and poorly sited modern farm buildings dominate many areas. Some traditional farm buildings have been converted to residential use.

## Summary

Like much of the Midlands lowlands, the landform and topography is shaped by the underlying sequence of Permo-Triassic Mudstones, Siltstones and Sandstones. The differential weathering of this geology gives rise to gently rolling landscape within incised valleys, locally undulating where the sandstone is most prevalent. Although there is some local variation in soils, relating to the variations in both geology and landform, they tend to be free-draining fine loams over clay subsoils that are prone to short-lived seasonal waterlogging.

A key feature of this landscape is its settled character. Although not densely populated, there is a general scattering of small villages, roadside cottages and farmsteads throughout, constructed in the vernacular style of red brick with Staffordshire blue clay tile roofs, and a few older, timber framed buildings.

The area's settled nature reflects its long history of exploitation for agriculture. The predominant land-use is pastoral associated with dairying. Much of the permanent pasture is now improved and some fields have been set aside for fodder crops. Increasingly there is a trend for more arable farming, particularly where gradients and drainage allow.

Trees are well represented, associated with scattered hedgerow and dense lines of watercourse trees. Woodlands occur infrequently, mostly associated with the steeper slopes of the Dove Valley or localised parkland, in the form of small plantations and game coverts. The trees help to define the small to medium scale by filtering views through the landscape. At lower elevations towards the Trent Valley, tree cover can give a strong sense of enclosure, particularly on views to the north.

### Planting and Management Guidelines

A gently undulating pastoral landscape of very few woodlands but densely scattered hedgerow and watercourse trees.

<b>Primary woodland character:</b>	Occasional small woodlands
<b>Primary tree character:</b>	Densely scattered hedgerow and dense watercourse trees
<b>Woodland vision:</b>	Occasional small woodlands
<b>Tree vision:</b>	Densely scattered hedgerow and dense watercourse trees

<b>Typical woodland size range:</b>	0.5 - 5ha	small
<b>Woodland pattern:</b>	Organic/ linear	

- Ensure the use of indigenous tree and shrub species, including a proportion of large, long-lived species.
- Ensure the management and enhancement of hedgerow trees, through selection and natural regeneration, or by planting.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.
- Ensure the conservation and management of mature/ veteran trees within hedgerows.
- Ensure new woodland does not conflict with features (e.g. ridge and furrow) that help to define landscape character.

# Needwood and South Derbyshire Claylands

## LANDSCAPE TYPE: SETTLED FARMLANDS

### Woodland Species Mix

#### Neutral/Slightly Acidic Soils

##### Primary Tree Species 50%

<i>Acer campestre</i>	Field Maple
<i>Fraxinus excelsior</i>	Ash
<i>Quercus robur</i>	Pedunculate Oak

##### Secondary Tree Species 20%

###### Major

<i>Betula pendula</i>	Silver Birch
<i>Malus sylvestris</i>	Crab Apple

###### Minor

<i>Populus tremula</i>	Aspen
<i>Prunus avium</i>	Wild Cherry
<i>Prunus padus</i>	Bird Cherry
<i>Salix cinerea</i>	Grey Willow
<i>Sorbus aucuparia</i>	Rowan
<i>Taxus baccata</i>	Yew

##### Shrubs 10-30%

###### Major

<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn

###### Minor

<i>Cornus sanguinea</i>	Dogwood
<i>Lonicera periclymenum</i>	Honeysuckle
<i>Prunus spinosa</i>	Blackthorn
<i>Rhamnus cathartica</i>	Purging Buckthorn
<i>Rosa canina</i>	Dog Rose
<i>Viburnum opulus</i>	Guelder Rose

##### Open space 0-20%

† Watercourse Trees - tree species most appropriate for planting as watercourse trees.

#### Waterlogged Conditions on all soil types

##### Primary Tree Species 50%

† <i>Alnus glutinosa</i>	Alder
† <i>Salix fragilis</i>	Crack Willow

##### Secondary Tree Species 20%

###### Major

<i>Betula pubescens</i>	Downy Birch
<i>Quercus petraea</i>	Sessile Oak
<i>Salix caprea</i>	Goat Willow

###### Minor

<i>Ilex aquifolium</i>	Holly
<i>Populus tremula</i>	Aspen

##### Shrubs 10-30%

###### Major

<i>Crataegus monogyna</i>	Hawthorn
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###### Minor

<i>Prunus spinosa</i>	Blackthorn
<i>Rhamnus cathartica</i>	Purging Buckthorn
<i>Salix purpurea</i>	Purple Willow
<i>Salix triandra</i>	Almond Willow
<i>Salix viminalis</i>	Osier

##### Open space 0-20%

### Hedgerow Species Mix

#### Suitable hedgerow plants

##### Primary 70-75%

<i>Crataegus monogyna</i>	Hawthorn
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##### Secondary 25-30%

<i>Acer campestre</i>	Field Maple
<i>Corylus avellana</i>	Hazel
<i>Ilex aquifolium</i>	Holly
<i>Prunus spinosa</i>	Blackthorn

##### Occasional 0-5%

<i>Cornus sanguinea</i>	Dogwood
<i>Lonicera periclymenum</i>	Honeysuckle
<i>Rhamnus cathartica</i>	Purging Buckthorn
<i>Rosa canina</i>	Dog Rose

#### Suitable hedgerow trees

##### Primary 70-75%

<i>Fraxinus excelsior</i>	Ash
<i>Quercus robur</i>	Pedunculate Oak

##### Secondary 25-30%

<i>Acer campestre</i>	Field Maple
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##### Occasional 0-5%\*

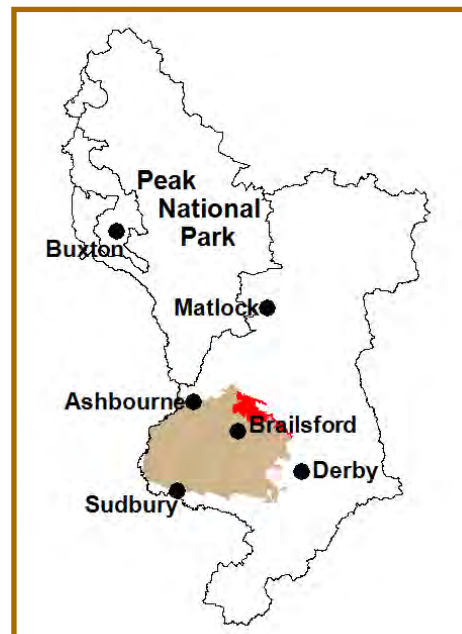
<i>Malus sylvestris</i>	Crab Apple
<i>Prunus avium</i>	Wild Cherry
<i>Prunus padus</i>	Bird Cherry
<i>Sorbus aucuparia</i>	Rowan

\* only to be used if occurring locally within the landscape character type

# Needwood and South Derbyshire Claylands

## LANDSCAPE TYPE: SANDSTONE SLOPES AND HEATHS

A landscape of moderate to steep sandstone slopes with prominent rounded undulations and hillocks forming the upper slopes. A pastoral landscape, with small woodlands and scattered hedgerow trees.



### Key Characteristics

- Moderate to steep sandstone slopes and valleys with rounded undulations
- Well-drained sandy soils
- A pastoral land-use on steeper slopes with mixed farming on gentler gradients
- Heathy associations with patches of gorse on steeper slopes and bracken along some hedgerows and road verges
- Tree cover defined by scattered hedgerow trees and patches of woodland
- Small to medium sized regular and sub-regular fields with mixed species hedgerows
- Sparsely settled landscape with the very occasional red brick and Staffordshire blue clay tile farmsteads and roadside cottages

### Geology and Landform

This is a landscape associated with moderate to steeply sloping valleys and slopes created by an underlying geology of Permo-Triassic Sandstone. Differential erosion along the slopes, particularly those facing west, has created a series of visually prominent, rounded undulations and hillocks.

### Soils and Land-Use

The sandstone bedrock gives rise to a reddish, coarse, sandy loam of

variable depth, depending upon the steepness of slope. These soils are well-drained and, where managed, readily absorb winter rainfall even on the steepest slopes.

The relatively steep slopes and impoverished nature of the soils ensures that pasture predominates. However, where the slopes are moderately steep or gentle, the agriculture is more mixed with some arable cropping. Water retention is poor and areas under arable production need regular irrigation during the summer months. Topsoil can dry out very quickly and in

cropping areas can be prone to wind erosion. In addition, cultivated steep slopes are especially susceptible to water erosion.

### Ecology

These free-draining sandy soils will naturally support acid grassland and heathy habitats. In areas of unimproved pasture on the steepest slopes, patches of acid grassland persist. Where this grassland has become neglected, gorse is beginning to colonise and there are some sizeable patches of gorse thicket. In other areas of neglected pasture and grassland some localised scrub has developed.

Another habitat type of this landscape is woodland which features as small patches throughout but is rarely a prominent visual feature. It tends to occur on the steeper, upper slopes where land is less cultivable.

Ecological corridors are variable depending to some extent upon the enclosure patterns and land-use. In areas of smaller, irregular fields, the hedgerows are commonly mixed species with holly, hazel and blackthorn. In areas of mixed

farming and larger fields, the hedgerow network is more fragmented and beginning to lose its ecological function. In areas of late enclosure hedgerows are generally single species hawthorn.

Large mature hedgerow trees and the occasional parkland tree add to the ecological diversity.

### Tree Cover

Tree cover is apparent throughout this landscape type but is rarely visually prominent. There are scattered boundary trees along hedgerows, often a mix of oak and ash. These are sparsely scattered in areas of mixed farming.

There are small woodlands usually associated with the steeper, less cultivable areas. The overall character is one of a well-treed landscape, but the undulating nature of the landform ensures that whilst there are open views across adjacent country, views through the landscape and along the slopes are often blocked or filtered by trees.

### Enclosure

Fields are predominantly small to medium size and regular in outline,

being more visually prominent in areas of mixed farming. On steeper slopes where woodland is traditionally more prevalent, fields may be smaller in size and more irregular in shape.

Hedgerows are predominantly hawthorn, though in areas of semi-regular fields or along historic boundaries, the hedgerows are more diverse, including species like hazel and holly.

### Transport

Lanes through this landscape are infrequent and often restricted to a single route running through the valley bottoms or gentler gradients. When the occasional lane runs up a slope it is invariably winding with irregular width verges and often sunken. In areas of former common, like that at Hulland Ward, the lanes are straight and direct with wide, uniform road verges.

### Built Environment

Settlement has been sparse in this landscape primarily due to steep, uncultivable slopes, although there are occasional farmsteads and cottages. Traditional building materials are almost exclusively red

brick with Staffordshire blue clay tile roofs, with sandstone having been reserved mainly for churches and larger estate houses. In areas of remnant parkland, larger estate farms and cottages are evident. In areas of former common there are small groups of wayside cottages.

There are remains of medieval deer parks, notably Mansell Park and Ravensdale Park, associated with a once extensive hunting forest; Duffield Frith was established shortly after the Norman Conquest. Today there remain many fragmentary features including park pale, deer chase, old routeways and former fishponds.



*Ravensdale Park deer chase*

The main environmental impacts on this landscape are large scale sand and gravel quarrying, a concrete products factory and modern farm buildings, including large chicken sheds.

## Summary

The underlying geology of Permo-Triassic Sandstone strongly influences both the physical and cultural characteristics of this landscape. The harder, more resistant sandstone weathers away more slowly to form this undulating landform of steep valley sides and slopes. Differential erosion has created visually prominent, rounded undulations and hillocks, most obvious on the west facing slopes.

Trees are well represented throughout, mainly as scattered hedgerow trees and the occasional small woodland. Views through the landscape are often restricted by both vegetation and landform, although there are views out across lower lying landscapes, particularly where this landscape occurs as a discrete slope.

The land-use is variable, depending upon the steepness of the slopes. It predominates as pasture with some mixed farming and arable on the gentler slopes. Where the pasture remains less intensive, there are areas of acid grassland. These support localised patches of gorse where the pasture is further neglected. This heathy association, as a result of the free-draining soils, is further evidenced by the amount of bracken that can be seen in road verges, hedgerows and woodland margins.

As a result of the low agricultural potential of this landscape, primarily due to landform, there is very little settlement throughout this landscape type. Some of the more remote slopes are unsettled whilst others have sparsely scattered farmsteads and estate cottages, built in the local red brick with Staffordshire blue clay tile roofs. In areas of former common there are small collections of wayside cottages. Remains of elements of a medieval deer park at Ravensdale constitute an impressive relict landscape.

### Planting and Management Guidelines

Moderate to steeply undulating pastoral landscape with thinly scattered plantations and hedgerow trees.

**Primary woodland character:** Thinly scattered small broadleaved plantations

**Primary tree character:** Thinly scattered hedgerow trees

**Woodland vision:** Thinly scattered small broadleaved plantations

**Tree vision:** Thinly scattered hedgerow trees

**Typical woodland size range:** 0.5 - 10ha      small

**Woodland pattern:** Regular plantations

- Ensure the use of indigenous tree and shrub species, including a proportion of large, long-lived species.
- Ensure a balance is maintained between new woodland planting and areas of nature conservation value.

# Needwood and South Derbyshire Claylands

## LANDSCAPE TYPE: SANDSTONE SLOPES AND HEATHS

### Woodland Species Mix

#### Neutral/ Slightly Acidic Soils

##### Primary Tree Species 50%

<i>Acer campestre</i>	Field Maple
<i>Fraxinus excelsior</i>	Ash
<i>Quercus robur</i>	Pedunculate Oak

##### Secondary Tree Species 20%

###### Major

<i>Betula pendula</i>	Silver Birch
<i>Malus sylvestris</i>	Crab Apple

###### Minor

<i>Populus tremula</i>	Aspen
<i>Prunus avium</i>	Wild Cherry
<i>Prunus padus</i>	Bird Cherry
<i>Salix cinerea</i>	Grey Willow
<i>Sorbus aucuparia</i>	Rowan
<i>Taxus baccata</i>	Yew

##### Shrubs 10-30%

###### Major

<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn

###### Minor

<i>Cornus sanguinea</i>	Dogwood
<i>Lonicera periclymenum</i>	Honeysuckle
<i>Prunus spinosa</i>	Blackthorn
<i>Rhamnus cathartica</i>	Purging Buckthorn
<i>Rosa canina</i>	Dog Rose
<i>Viburnum opulus</i>	Guelder Rose

##### Open space 0-20%

### Hedgerow Species Mix

#### Suitable hedgerow plants

##### Primary 70-75%

<i>Crataegus monogyna</i>	Hawthorn
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##### Secondary 25-30%

<i>Acer campestre</i>	Field Maple
<i>Corylus avellana</i>	Hazel
<i>Ilex aquifolium</i>	Holly
<i>Prunus spinosa</i>	Blackthorn

##### Occasional 0-5%

<i>Cornus sanguinea</i>	Dogwood
<i>Lonicera periclymenum</i>	Honeysuckle
<i>Rhamnus cathartica</i>	Purging Buckthorn
<i>Rosa canina</i>	Dog Rose
<i>Viburnum opulus</i>	Guelder Rose

#### Suitable hedgerow trees

##### Primary 70-75%

<i>Fraxinus excelsior</i>	Ash
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##### Secondary 25-30%

<i>Acer campestre</i>	Field Maple
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##### Occasional 0-5%\*

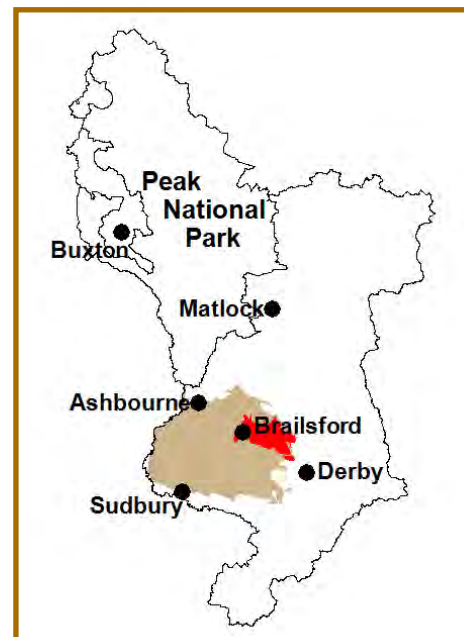
<i>Malus sylvestris</i>	Crab Apple
<i>Prunus avium</i>	Wild Cherry
<i>Prunus padus</i>	Bird Cherry
<i>Sorbus aucuparia</i>	Rowan

\* only to be used if occurring locally within the landscape character type

# Needwood and South Derbyshire Claylands

## LANDSCAPE TYPE: ESTATE FARMLANDS

A broad, gently rolling lowland mixed farming landscape with occasional red brick villages, scattered estate farmsteads and country houses. Tree cover is well represented with small estate woodlands, dense watercourse trees, scattered hedgerow trees and localised parkland trees.



### Key Characteristics

- Gently rolling lowland dissected by minor river valleys
- Seasonally waterlogged fine loamy soils over Permo-Triassic Mudstones, Siltstones and Sandstones
- Mixed farming with intensive arable cropping and improved permanent pasture
- Prominent estate woodlands with broadleaf and coniferous species
- Scattered oak and ash trees along hedgerows
- Dense lines of trees along streams
- Small to medium size semi-regular and regular fields enclosed by hedgerows
- Small villages constructed of red brick with Staffordshire blue clay tiled roofs
- Scattered red brick estate farmsteads and the occasional country house

land-use within this landscape type is mixed farming, with intensive arable cropping and improved permanent pasture. Pasture is most prevalent on the slightly heavier soils over mudstone and on the locally steeper slopes.

### Ecology

Ecologically, this landscape type is poor as a result of intensive farming practices. The arable crops and improved permanent pastures and leys are of little ecological value. Remnant unimproved grassland is now confined to the road margins and the occasional field margin in pastoral areas.

### Geology and Landform

The undulating geology comprises of alternating bands of Permo-Triassic Mudstones, Siltstones and Sandstones. The differential weathering and erosion of the bedrock has given rise to a gently rolling topography where the harder sandstone forms the shallow ridges and hills. Where sandstone is more prevalent in the bedrock the landform becomes more undulating with steeper slopes.

### Soils and Land-Use

The underlying geology supports a deep, fine loamy soil with some slight local variation based on the precise nature of the bedrock. The subsoils are slowly permeable so these soils are prone to some seasonal waterlogging, although only for short periods.

The landform and soils collectively form land of above average quality for agriculture and, as a result, the

Terrestrial corridors are strong with many good hedgerows and lines of trees along watercourses. The value of some hedgerows has been much reduced by poor management, with many hedgerows over-flailed and becoming gappy.

Numerous small woodland blocks interlink, forming a more complex network of habitats supplementing the terrestrial corridors. The value of some woodland blocks is

diminished by virtue of their more ornamental nature and composition of coniferous and non-native species.

Wet pasture and patches of marsh with *Juncus* are a feature of some of the minor stream valleys. Mercaston Marsh is an important wetland meadow site and is a designated SSSI. It exhibits a range of habitats which would once have been much more widespread in other stream valleys that dissect this landscape.

Bracken is occasionally present in road verges being indicative of a heathier habitat. This is most notable where the soils are freer draining, over sandstone or on steeper slopes.

### Tree Cover

Trees and especially woodlands are well represented in this landscape type and play an important role in emphasising its estate character. Scattered, mature boundary trees, usually a mix of oak and ash, are found along most hedgerows. The wooded character is reinforced by dense lines of trees along watercourses, typically alder and willow but also the occasional oak or ash. In and around the small villages amenity trees are prominent, as are the parkland trees where they occur.

Woodlands tend to occur as small estate plantations, tree belts and small coverts, formerly managed by estates for game rearing. As a result, much of the estate woodlands are predominantly broadleaf species and have regular shaped outlines. Locally around Kedleston Park, the landscape appears to be more wooded due in part to the existence of some much larger woodlands.

Together the trees combine to restrict or filter views through the landscape. Where hedgerow trees are less obvious, woodland blocks may assist in framing longer views to landscapes beyond.

### Enclosure

This is a landscape of small to medium size fields, which are predominantly sub-regular in shape but display much local variation in pattern as a result of the area's diverse history of enclosure. The intensification in arable farming in recent years has led to the loss of many field boundaries with numerous small fields amalgamated into larger units.

Around villages the fields tend to be smaller and semi-regular in shape, reflecting the enclosure of land from former open fields. Where these boundaries remain in good condition, the reverse 'S' of former selion strips can still be seen. In these areas of earlier enclosure, many of the hedgerows contain a good variety of species including holly, hazel, blackthorn and hawthorn.

Where land was enclosed from former parkland, the field pattern has a larger scale and regular outline and, as a result, has less diverse hedgerows with hawthorn as the main species.

Today the estate influence is still evident. Many of the hedgerows are formally managed and regularly flail cut into a box or trapezoid outline.

### Transport

There is a dense network of winding lanes that reflect the irregular outline of the semi-regular fields or follow the easier gradients. These lanes with irregular width

verges connect the small villages and scattered estate farmsteads.

There are many footpaths and green lanes which also connect the settlements. Many of these are historic routeways and are often bound by hedgerows with a diverse species composition.

### Built Environment

This is a sparsely populated landscape. At Kedleston, this is the result of the removal of the village, as part of the creation of the landscaped park. Villages, like Weston Underwood and Mercaston, tend to be small and nucleated, often being located away from modern through routes. Most of these settlements have grown relatively little, although modern infill development is beginning to modify their original loose knit character.

Between the villages there are sparsely scattered large estate farmsteads, built in the local red brick with Staffordshire blue clay tile roofs.

A key feature of this landscape and quintessential to its character is the Kedleston Estate. Kedleston Hall is a Grade 1 listed building and a superb example of a Georgian country house. The house, its pleasure gardens and associated buildings stand within an outstanding landscaped park, all designed by Robert Adam. The pleasure gardens and park are a Grade 1 Registered Park and Garden.



Kedleston Hall

## Summary

The landform and topography is shaped by the underlying sequence of Permo-Triassic Mudstones, Siltstones and Sandstones. The differential weathering of this geology gives rise to a gently rolling landscape, locally undulating where the sandstone is more prevalent. Although there is some local variation in soils, relating to the variations in both geology and landform, they tend to be free-draining fine loams that are prone to short-lived seasonal waterlogging.

However, it is not the physical factors that are most influencing the character of this landscape but its cultural associations with large estates and parks. These include both existing parks like that at Kedleston and former parks such as Meynell Langley.

Woodland is a dominant feature, affecting the character of the landscape, and influencing the views through it and from it to adjacent landscapes. The estate influences are clearly evident, with many of the woodlands being mixed species plantations, managed as game coverts or for commercial timber. The woodlands are generally small in size and have regular outlines. The wooded character of this landscape is further emphasised by dense lines of watercourse trees and scattered hedgerow trees.

The landscape is perceived as medium scale due to the small to medium size fields between the trees and woodlands. The fields display a variety of patterns, reflecting the diverse nature of enclosure and more recent effects of agricultural intensification. Many of the hedgerows are well-managed, and sometimes over-managed, by flail cutting.

At the heart of this landscape lies Kedleston Hall, one of the finest country houses in England, standing in an idealised 'classical' parkland landscape.

### Planting and Management Guidelines

A gently rolling mixed farming landscape with densely scattered small estate plantations, hedgerow trees and watercourse trees.

<b>Primary woodland character:</b>	Densely scattered small mainly broadleaved plantations
<b>Primary tree character:</b>	Densely scattered hedgerow and dense watercourse trees
<b>Woodland vision:</b>	Densely scattered small mainly broadleaved plantations
<b>Tree vision:</b>	Densely scattered hedgerow and dense watercourse trees

<b>Typical woodland size range:</b>	0.5 - 5ha	small
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<b>Woodland pattern:</b>	Regular plantations
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- Small-medium scale woodland planting.
- Promote linked extensions to ancient woodland by natural regeneration and planting.
- Re-establish and enhance physical links between existing isolated woodland and hedgerows.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.

# Needwood and South Derbyshire Claylands

## LANDSCAPE TYPE: ESTATE FARMLANDS

### Woodland Species Mix

#### Neutral/ Slightly Acidic Soils

##### Primary Tree Species 50%

<i>Acer campestre</i>	Field Maple
<i>Fraxinus excelsior</i>	Ash
<i>Quercus robur</i>	Pedunculate Oak

##### Secondary Tree Species 20%

###### Major

<i>Betula pendula</i>	Silver Birch
<i>Malus sylvestris</i>	Crab Apple

###### Minor

<i>Populus tremula</i>	Aspen
<i>Prunus avium</i>	Wild Cherry
<i>Prunus padus</i>	Bird Cherry
<i>Salix cinerea</i>	Grey Willow
<i>Sorbus aucuparia</i>	Rowan
<i>Taxus baccata</i>	Yew

##### Shrubs 10-30%

###### Major

<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn

###### Minor

<i>Cornus sanguinea</i>	Dogwood
<i>Ilex aquifolium</i>	Holly
<i>Lonicera periclymenum</i>	Honeysuckle
<i>Prunus spinosa</i>	Blackthorn
<i>Rhamnus cathartica</i>	Purging Buckthorn
<i>Rosa canina</i>	Dog Rose
<i>Viburnum opulus</i>	Guelder Rose

##### Open space 0-20%

† Watercourse Trees - tree species most appropriate for planting as watercourse trees.

#### Waterlogged Conditions on all soil types

##### Primary Tree Species 50%

† <i>Alnus glutinosa</i>	Alder
† <i>Salix fragilis</i>	Crack Willow

##### Secondary Tree Species 20%

###### Major

<i>Betula pubescens</i>	Downy Birch
<i>Salix caprea</i>	Goat Willow

###### Minor

<i>Populus tremula</i>	Aspen
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##### Shrubs 10-30%

###### Major

<i>Crataegus monogyna</i>	Hawthorn
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###### Minor

<i>Prunus spinosa</i>	Blackthorn
<i>Rhamnus cathartica</i>	Purging Buckthorn
<i>Salix purpurea</i>	Purple Willow
<i>Salix triandra</i>	Almond Willow
<i>Salix viminalis</i>	Osier

##### Open space 0-20%

### Hedgerow Species Mix

#### Suitable hedgerow plants

##### Primary 70-75%

<i>Crataegus monogyna</i>	Hawthorn
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##### Secondary 25-30%

<i>Acer campestre</i>	Field Maple
<i>Corylus avellana</i>	Hazel
<i>Ilex aquifolium</i>	Holly
<i>Prunus spinosa</i>	Blackthorn

##### Occasional 0-5%

<i>Cornus sanguinea</i>	Dogwood
<i>Lonicera periclymenum</i>	Honeysuckle
<i>Rhamnus cathartica</i>	Purging Buckthorn
<i>Rosa canina</i>	Dog Rose

#### Suitable hedgerow trees

##### Primary 70-75%

<i>Fraxinus excelsior</i>	Ash
<i>Quercus robur</i>	Pedunculate Oak

##### Secondary 25-30%

<i>Acer campestre</i>	Field Maple
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##### Occasional 0-5%\*

<i>Malus sylvestris</i>	Crab Apple
<i>Prunus avium</i>	Wild Cherry
<i>Prunus padus</i>	Bird Cherry
<i>Sorbus aucuparia</i>	Rowan

\* only to be used if occurring locally within the landscape character type

# Needwood and South Derbyshire Claylands

## LANDSCAPE TYPE: RIVERSIDE MEADOWS

Flat flood plains, containing meandering rivers and streams with dense trees along riverbanks.  
A pastoral landscape of large, hedged fields with trees scattered along boundaries.



### Key Characteristics

- Flat flood plains containing meandering rivers and streams
- Seasonally waterlogged soils over alluvium
- Permanent pasture
- Localised patches of rushes in damp hollows
- Scattered locally dense trees along watercourses; widespread alder and localised willow
- Scattered trees along boundaries
- Regular shaped fields bounded by hawthorn hedges
- Lanes alongside or crossing the flood plain
- Active and disused railway lines with secondary woodland along embankments

### Geology and Landform

The underlying sediment of these flat flood plains consists of alluvial mud lying over gravels, deposited by the rivers in times of flood. The gravel acts as an aquifer carrying water from the adjoining land into the rivers and so is permanently waterlogged. In places there are natural raised banks to the rivers known as levees. These are formed as a result of the deposition of sediment by waning floodwaters. The upper flood plain brooks are narrow, such as Sutton and Markeaton Brook. The flood plain broadens out down the lower part of the Dove.

### Soils and Land-Use

The soils are seasonally waterlogged clayey loams. Some areas are more permanently waterlogged and some hollows retain floodwater long after the majority of floods have subsided. The predominant land-use is pastoral.

The flood plain makes good quality fattening pastures. The wet, fine textured soils and risk of flooding make the land difficult to work for arable cropping, although some arable fields can be found in the lower Dove Valley as a result of recent drainage improvements and flood protection measures.

### Ecology

The Sutton Brook and its tributaries are narrow with unpolluted water making it very valuable as a freshwater habitat. The River Dove is fairly wide and deep with relatively clean water. All these watercourses are important wildlife habitats, as are their banks and margins. Some old oxbow lakes, such as Old Marston SSSI, are diverse habitats of value as part of the river corridor.

The remaining unimproved pasture occurs in concentrations along the Dove, north of Doveridge. Pasture with a high water table and where the soil is permanently wet is important ecologically for its species-rich flora, ground beetles and birds, such as curlew and snipe. However, such habitats are becoming increasingly rare, as former pastures have often been converted to arable following drainage improvements.

Further habitat diversity is provided by bands of scrub and secondary woodland that fringe transport corridors.

Improved drainage, conversion to arable and localised culverting is

leading to a significant loss of meadowland.



*Pastoral grazing on the flood plain*

### Tree Cover

There are dense lines of trees along riverbanks, mainly alder with occasional willows. Some trees have been removed from the riverbanks, as part of flood protection works, and there is die-back in other places.

There are also mature trees scattered along fields boundaries, chiefly oak, ash and willow.

Both watercourse and boundary trees are noticeably denser in the more intimate landscape of the Sutton Brook valley, giving a more wooded aspect.

### Enclosure

Fields are medium to large sized and of sub-regular shape; the larger fields being found in the lower river valleys. Many of the boundaries are comprised of tall and gappy thorn hedgerows. Some fields have evidence of medieval ridge and furrow.

### Transport

The lanes and major roads tend to run along the edge of the flood

plain, raised on embankments that minimise the risk of flooding. Occasionally, roads cross the valleys on bridges over the rivers.

The railways follow the floor of the flood plain along the Dove, often on raised embankments.

### Built Environment

Historically there would have been little built development on the flood plain, excepting the occasional water mill for grinding corn. There are occasional farmsteads on the higher, better drained areas. Due to their unsuitability for built development, some flood plain areas have been made over to recreational use. Sections of the river and meadowland are lost entirely in places where they have been culverted or drained.

## Summary

This flat river meadow landscape is characterised by a narrow alluvium flood plain in the upper river and brook valleys, which broaden out in the lower Dove. The upper river and brook areas are more treed and, as they are also narrower, have filtered views and are more intimate. Views become more open as the tree cover becomes scattered along the lower stretches of the rivers, where there are less hedgerow trees and the flood plain widens.

Medium to large sized pastoral fields of sub-regular shape are enclosed by hedgerows, many of which are gappy and neglected. Historical ridge and furrow add local distinctiveness to the river meadow fields. Changes to river meadows, by the introduction of drainage schemes to produce improved pasture and arable farmland, are threatening the river meadow pastoral landscape.

Although largely unsettled, transport routes (road and railway) dominate the landscape in the lower Dove.

### Planting and Management Guidelines

An open flood plain with dense watercourse trees.

Primary woodland character:	Unwooded
Primary tree character:	Dense watercourse trees
Woodland vision:	Occasional small wet woodlands
Tree vision:	Dense watercourse trees

Typical woodland size range:	0.5 - 5ha
Woodland pattern:	Organic/ linear

- Ensure the use of indigenous tree and shrub species, including a proportion of large, long-lived species.
- Ensure a balance is maintained between new woodland planting and areas of nature conservation value.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.
- Encourage the continuing practice of pollarding to maintain the traditional riparian character of the landscape.

# Needwood and South Derbyshire Claylands

## LANDSCAPE TYPE: RIVERSIDE MEADOWS

### Woodland Species Mix

Waterlogged Conditions  
on all soil types

Primary Tree Species 50%

† <i>Alnus glutinosa</i>	Alder
† <i>Salix fragilis</i>	Crack Willow

Secondary Tree Species 20%

Major

<i>Betula pubescens</i>	Downy Birch
<i>Salix caprea</i>	Goat Willow

Minor

<i>Ilex aquifolium</i>	Holly
<i>Populus tremula</i>	Aspen

Shrubs 10-30%

Major

<i>Crataegus monogyna</i>	Hawthorn
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Minor

<i>Prunus spinosa</i>	Blackthorn
<i>Rhamnus cathartica</i>	Purging Buckthorn
<i>Salix purpurea</i>	Purple Willow
<i>Salix triandra</i>	Almond Willow
<i>Salix viminalis</i>	Osier

Open space 0-20%

† Watercourse Trees - tree species most appropriate for planting as watercourse trees.

### Hedgerow Species Mix

#### Suitable hedgerow plants

Primary 85-100%

<i>Crataegus monogyna</i>	Hawthorn
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Occasional 0-15%

<i>Acer campestre</i>	Field Maple
<i>Prunus spinosa</i>	Blackthorn

#### Suitable hedgerow trees

Primary 70-75%

<i>Fraxinus excelsior</i>	Ash
<i>Quercus robur</i>	Pedunculate Oak
<i>Salix fragilis</i>	Crack Willow

Secondary 25-30%

<i>Acer campestre</i>	Field Maple
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Occasional 0-5%\*

<i>Malus sylvestris</i>	Crab Apple
<i>Prunus avium</i>	Wild Cherry
<i>Prunus padus</i>	Bird Cherry
<i>Sorbus aucuparia</i>	Rowan

\* only to be used if occurring locally within the landscape character type