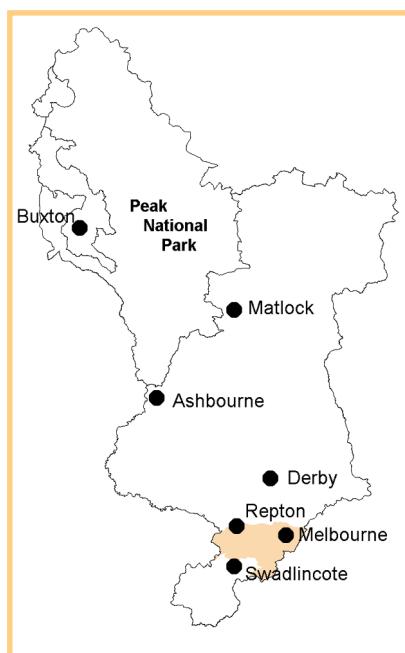


MELBOURNE PARKLANDS

CHARACTER AREA 70

An undulating mixed farming landscape with country houses, landscaped parks and estate plantations



Location of
Melbourne Parklands

Introduction

The Melbourne Parklands Character Area is an undulating landscape that extends through South Derbyshire from the Staffordshire border in the west into Leicestershire to the east. The Trent Valley forms the northern and western boundary to the area as it sweeps round in a broad arc from Burton-on-Trent to its confluence with the River Soar in Leicestershire. To the south of the area is the South Derbyshire Coalfield.

A complex geology has resulted in an undulating landscape with many valleys, two of which have been dammed to create reservoirs at Foremark and Staunton Harold. Relative to the Trent Valley the area is elevated with commanding views north and west over the River Trent to landscapes beyond.

The majority of the area is lightly populated although settlement is more substantial along the edge of the Trent Valley with Repton

Landscape Character Types

- Estate Farmlands
- Sandstone Slopes and Heaths
- Wooded Estatelands
- Riverside Meadows

"Towards the south and the west, the view is that of well cultivated fertile uplands and dales, diversified with stately timber and country seats.... towards the east the domain of Foremark and the woods around Ingleby close the prospect"
pp 294-295 'Guide to Derbyshire', Bemrose'

and Melbourne being important historic settlements.

There are extensive areas of arable farming set within a regular pattern of fields with low hedges and few hedgerow trees. Woodlands occur on steeper slopes, usually along valley sides, but are particularly evident in association with historic parklands at Calke, Melbourne, Staunton Harold, Bretby and elsewhere.

Physical Influences

The area is dominated by Triassic Mercia Mudstones but there are outcrops of Millstone Grit around Melbourne and Sherwood. Sandstones extend towards the River Trent. Differential erosion by rivers of this complex geology has created an undulating landform with narrow valleys defining *Sandstone Slopes and Heaths* and the upstanding plateaux of the *Estate Farmlands*. The soils are predominantly productive reddish clays with some free draining sandy soils, over sandstone.

Natural Influences

Most of the land is in agricultural use and as a result contains very few semi-natural habitats. On the plateau within the *Estate Farmlands* there are extensive areas of intensive arable farming

with low hedgerows and few trees. Where the land is steeper or the soils heavier the land is less intensively farmed with a mix of arable and pasture. Here the hedgerows are more substantial, hedgerow trees are more frequent and there is some permanent pasture.

The main ecological value of the area comes from its many woodlands, particularly associated with the *Wooded Estatelands*. There are woodlands containing oak and many mature specimen trees set in parkland. Some parks were formerly more extensive and parkland trees, often in poor condition, can be seen within farmland.

The underlying geology and free draining soils of the *Sandstone Slopes and Heaths* provide localised heathy conditions, evidenced by scrubby gorse along steep slopes and road verges.

Human Influences

There is scattered evidence of Mesolithic, Neolithic and Bronze Age occupation of the area, although this appears to relate to activity spreading out from the Trent and Tame valleys. The first substantial evidence of human occupation comes from the Anglo-

Saxon period. Repton was an important ecclesiastical centre for the kingdom of Mercia. The many place names ending in 'ton', the lack of woodland names and the references to heath indicate that the area has a long history of settlement from an early date.

By the time of the Domesday Book the area was still widely, if rather sparsely, settled, with Melbourne becoming an important post-Conquest market and manorial town. Monasteries, set within extensive parks, were established at Calke and Repton. The dissolution of the monasteries in the 16th century and the developing land market led to the formation of large estates and ultimately the construction of large country houses and landscaped parks that are so much a feature of the

Melbourne Parklands, most evident within the *Wooded Estate*lands. Calke Abbey is a fine example of a country house set in parkland, at the gates of which stand the largely unaltered estate villages of Ticknall and Calke.

Most of the land remained unenclosed in open fields until the 18th and 19th centuries when the rectilinear pattern of fields, that is still seen today, was created. During this time of enclosure many of the farms that survive were built. Industrial development largely passed the area by. The main impacts have occurred within the *Estate Farmlands* through agricultural intensification, leading to the removal and over-management of hedgerows and the subsequent loss of hedgerow trees.

The traditional building materials that define the Melbourne Parklands are a mellow red brick and blue or red clay roof tiles, although some local sandstones have been used for building, particularly at Repton and Melbourne.

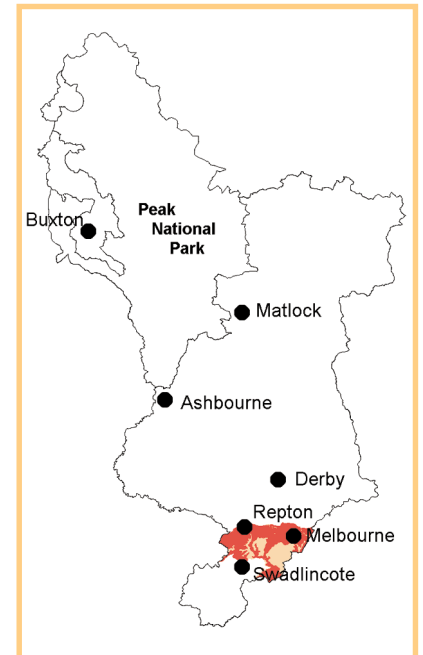
A large part of this Character Area lies within the National Forest and will be subject to large scale woodland planting allied to other landscape and nature conservation improvements.

Other Considerations

- The National Forest Strategy and BAP
- The Lowland Derbyshire BAP

LANDSCAPE TYPE: ESTATE FARMLANDS

This is a broad, gently rolling lowland, mixed farming landscape with estates. Trees and woodland are well represented throughout and there are occasional red brick villages, scattered estate farmsteads and country houses.



Key Characteristics

- Gently rolling lowland sandstone plateau 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
- Estate woodlands with broadleaf and coniferous species
- Scattered oak and ash trees along hedgerows
- Dense lines of trees along streams
- Predominantly medium size semi-regular and regular fields enclosed by hedgerows
- Settlements constructed of red brick with red clay tiled roofs
- Scattered red brick estate farmsteads and the occasional country house
- Open views from elevated areas, some long distance, over surrounding lower lying landscapes

Geology and Landform

The undulating geology comprises of alternating bands of Permo-Triassic mudstones, siltstones and sandstones and occasionally harder Carboniferous sandstone. 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. Where the sandstone defines a broader upstanding plateau landscape there is a distinct sense of elevation.

Soils and Land Use

Where the underlying geology comprises mudstone and siltstone then the soils are deep fine loams 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. However, any waterlogging is usually only short lived. Over Permo-Triassic and Carboniferous sandstone the soils tend to be reddish coarser loams. These soils are brown earths, often deep and permeable, passing to soft sandstone.

Landform and soils collectively form land of above average quality for agriculture and as a result the 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. The plateau areas are predominantly arable due to the gentle relief and the well drained, easily cultivated soils.

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.

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 over-flailed and becoming gappy.

Numerous small woodland blocks interlink to form a more complex network of habitats that supplement the terrestrial corridors. The value of these 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 rushes are a feature of some of the minor stream valleys.

The free draining sandy soils over sandstone inherently support lowland heath and bracken. This is occasionally observed in road verges, hedgerows and woodland margins, providing evidence of this particular habitat type.

Tree Cover

Trees, and especially woodland, are well represented throughout, though there is some local variation. Collectively the trees and woodlands play an important role in emphasising 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 in places.

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 woodland has regular shaped outlines and mixed species composition.



The woodlands are less frequent on the ridges and plateaux where the gentler relief and easily worked soils ensure that arable cropping prevails.

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. The relative lack of trees on the plateaux means that there are open, sometimes long distance views across surrounding landscapes.

Enclosure

There is much variation in the field patterns, reflecting the diverse history of enclosure. Within the lower lying valleys the fields are mainly small to medium size and more irregular in shape representing some of the areas of earliest enclosure. Around the 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. Intensification of arable farming in recent years has led to the loss of field boundaries with many small fields amalgamated into larger units.

In plateau areas the fields are generally medium to large in size, often regular and geometric in

shape, reflecting a period of later field enclosure. These areas would have been enclosed later by parliamentary award and as a result have less diverse hedgerows with hawthorn being the main species.

Today the estate influence is still evident with many of the hedgerows managed very formally, regularly flail-cut into a box or trapezoid outline.

Transport

There is a dense network of winding lanes that reflect the outline of the semi-regular fields or follow the easier gradients. These lanes, with irregular width verges, connect small villages and scattered estate farmsteads. In areas of later enclosure the roads tend to be straight and direct with uniform width verges.

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

Built Environment

This relatively sparsely populated landscape has a number of country houses set in landscaped parks. The principal settlements of Repton and Melbourne have an impressive number of historic buildings, built predominantly of buff sandstone and brick with red clay roof tiles.

Between villages there are sparsely scattered estate farmsteads, which tend to be large and built in the local vernacular materials of red brick with Staffordshire blue clay tile roofs.



LANDSCAPE TYPE: ESTATE FARMLANDS

Summary

Like much of the midland 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, locally undulating where the sandstone is most prevalent. Where harder sandstone rises out of this lowland landscape it creates a series of gently rolling plateaux. 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 physical factors alone that define the character of the landscape but also its cultural associations with large estates, and the settlements of Repton and Melbourne. The historic origins of Repton (Anglo Saxon) and Melbourne (Norman) remain evident and these well preserved settlements make a significant contribution to the area's particular character.

Woodland is a dominant feature affecting the character of the landscape and influencing the views through it and from it to adjacent landscapes. Estate influences are clearly evident with many of the woodlands being mixed species plantations managed as game coverts or for commercial timber. 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.

This is a medium scale landscape defined by field pattern and tree cover. Fields display a variety of patterns reflecting the diverse nature of enclosure and today these patterns have been impacted upon by the intensification of agriculture. Many of the hedgerows are well managed, some being over managed, by flail cutting.

LANDSCAPE TYPE: ESTATE FARMLANDS

Planting and Management Guidelines

Gently rolling, lowland, mixed farming landscape with scattered small estate plantations, scattered hedgerow trees and dense watercourse trees.
Part of this landscape character type lies within the National Forest.

Primary woodland character: Thinly scattered small plantations

Primary tree character: Thinly scattered hedgerow trees, dense watercourse trees and localised amenity tree groups.

Woodland vision (Outside the National Forest): Thinly scattered small plantations
Note 40% of this area is within the National Forest.
Where appropriate refer to the National Forest Strategy and Guidance.

Tree vision: Thinly scattered hedgerow trees, dense watercourse trees and localised amenity tree groups.

Typical woodland size range: 0.5 - 10 ha small

Woodland pattern: Regular plantations

- Small 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.
- Conserve and renew ornamental plantations and individual parkland trees.
- National Forest Guidelines apply for the area within the National Forest.

LANDSCAPE TYPE: ESTATE FARMLANDS

Woodland Species Mix

Neutral/slightly acidic soils

Primary Tree Species 50%
 # *Fraxinus excelsior* Ash
 # *Quercus robur* Pedunculate Oak

Secondary Tree Species 20%
Major
Acer campestre Field Maple
Ilex aquifolium Holly
Minor
Malus sylvestris Crab Apple
Populus tremula Aspen
Sorbus aucuparia Rowan
Tilia cordata Small Leaved Lime

Shrubs 10-30%
Major
Corylus avellana Hazel
Crataegus monogyna Hawthorn
Minor
Prunus spinosa Blackthorn
Rhamnus cathartica Purging Buckthorn
Salix cinerea Grey Willow

Open Space 0-20%

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

Amenity Trees - tree species most appropriate for planting as amenity trees associated with settlement, or other locally occurring large woodland species.

* Plant only **native** Black Poplar (sub species *betulifolia*). Contact Derbyshire Wildlife trust for information.

Waterlogged conditions on all soil types

Primary Tree Species 50%
 + *Alnus glutinosa* Alder
 + *Salix fragilis* Crack Willow

Secondary Tree Species 20%
Major
Betula pubescens Downy Birch
Fraxinus excelsior Ash
Minor
 * *Populus nigra*
 ssp. betulifolia Black Poplar
Quercus robur Pedunculate Oak
Salix caprea Goat Willow

Shrubs 10-30%
Major
Salix cinerea Grey Willow
Sambucus nigra Elder
Minor
Crataegus monogyna Hawthorn
Frangula alnus Alder Buckthorn
Rhamnus cathartica Purging Buckthorn
Salix viminalis Osier
Viburnum opulus Guelder Rose

Open space 0-20%

Hedgerow Species Mix

Suitable hedgerow plants

Primary 70-75%
Crataegus monogyna Hawthorn

Secondary 25-30%
Acer campestre Field Maple
Corylus avellana Hazel
Ilex aquifolium Holly
Prunus spinosa Blackthorn

Occasional 0-5%
Rhamnus cathartica Purging Buckthorn

Suitable hedgerow trees

Primary 70-75%
Fraxinus excelsior Ash
Quercus robur Pedunculate Oak

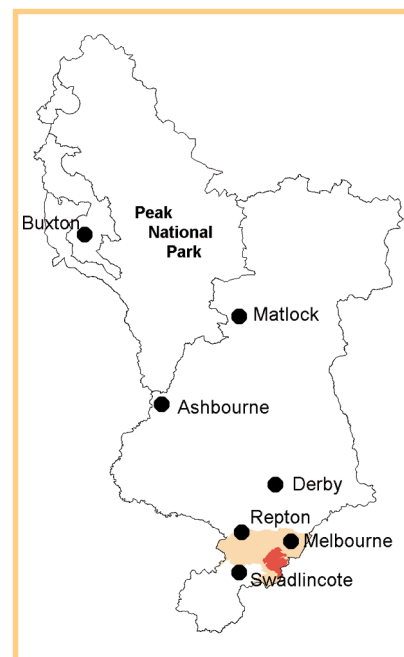
Secondary 25-30%
Acer campestre Field Maple
Tilia cordata Small Leaved Lime

Occasional 0-5%*
Malus sylvestris Crab Apple
Populus tremula Aspen
Sorbus aucuparia Rowan

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

LANDSCAPE TYPE: WOODED ESTATELANDS

A large scale, gently undulating, estate landscape defined by extensive tree cover comprising interlocking plantation woodlands, densely scattered hedgerow trees, dense watercourse trees and localised parkland trees. There are large, red brick estate farms scattered throughout and the occasional country house.



Key Characteristics

- Underlying geology of sandstone, mudstone and coal measures giving rise to a large scale, gently undulating landform
- Mixed farming with occasional areas of unimproved pasture
- Medium size interlocking plantation woodlands of mixed species composition
- Densely scattered hedgerow trees and dense lines of watercourse trees
- Extensive parkland trees including ornamental specimens, tree groups and avenues
- Medium size regular shaped fields with hawthorn hedgerows
- Well wooded landscape with views restricted by tree cover

Geology and Landform

The underlying geology of Carboniferous coal measures defines a broadly undulating landscape having an alternating sequence of sandstone, mudstone and coal seams. The differential erosion of this geology gives rise to a gently undulating or rolling landform where the more resistant sandstone forms minor ridges.

Soils and Land Use

The soils are typical of those overlying coal measures, with slowly permeable soils over the Carboniferous mudstones and shales, and some well drained soils over sandstones. Head from the weathered sandstone is widespread, so that the upper horizons of much of this soil is fine loamy rather than clayey or

silty. Being slowly permeable over mudstone and shale, these soils can be prone to seasonal water-logging.

The predominant land-use is mixed farming although there are extensive areas of parkland. The parkland remains essentially pastoral in character and where the soils are heaviest or the slopes locally steep, pasture predominates. Much of the pasture has been improved and where the soils are free draining there is some cropping.

Ecology

The ecology of this landscape type is variable, mostly relating to the intensity of land use. Where pasture prevails, particularly within the parkland, there are large areas of unimproved

pasture. Typically remnant acid grassland is found over sandstone and neutral grassland in the more nutrient rich valleys.

Trees and woodland are a key ecological resource. Numerous small to medium size plantations interlink to form a complex network of habitats, supplemented by connecting corridors formed by the hedgerows. The value of the woodlands is diminished by the presence of many non-native commercial species and the hedgerows are predominantly single species hawthorn. There are many trees scattered through the hedgerows, lines along watercourses and localised parkland trees. Many are veteran specimens. Where oak and ash are present the ecological value is increased.

Tree Cover

This is a well-wooded landscape where tree cover is a visually prominent and key characteristic. Mixed species woodlands interlock and there are

densely scattered hedgerow trees that are mainly a mix of oak and ash. The wooded character is further enhanced by dense lines of trees along the watercourses, which are commonly a mix of willow and alder with the occasional ash. Many of the woodlands are estate plantations often having regular outlines, although there is still the occasional remnant ancient woodland with more irregular outlines.

Within the grounds of Calke Abbey and the immediate surroundings there are numerous parkland trees, ancient reminders of former wood pasture. These are present as individual specimens, small ornamental tree groups or avenues. Together the trees and woodlands combine to restrict views through the landscape and limit views to landscapes beyond.

Enclosure

The enclosure pattern is one of medium to large size regular fields with hawthorn hedgerows. It is mainly the woodlands and trees which define the scale of the enclosure.

Transport

There are few lanes. Where they occur they are organic in character with irregular width verges and connect occasional small clusters of dwellings or scattered farmsteads and cottages.

Built Environment

This is inherently a sparsely settled landscape, due in part to its development as parkland. Ticknall is a settlement associated with the quarrying of a small outcropping of limestone but also had a post medieval pottery industry. Traditional

building materials are sandstone or red brick with blue clay tile roofs.

Between villages there are scattered farmsteads and cottages built of red brick with blue clay tile roofs. Many of these are estate farms and as such tend to be large.

At the centre of this landscape character type, and a major determinant of its overall character, is Calke Abbey and its landscaped park which contains ancient woodlands.



Calke Abbey

Summary

The underlying geology of Carboniferous sandstones, mudstones and shales have varying resistances to erosion and define a broadly undulating landscape where sandstone forms the minor ridges. As a result the soils are equally variable with slowly permeable, seasonally waterlogged soils over the mudstone and free draining soils over sandstone.

The character of this landscape type is defined as much by its cultural associations as by its physiography, with Calke Abbey Park being at the heart of it.

The estate character is reinforced by numerous small to medium size plantation woodlands comprising a mix of broadleaf and coniferous tree species. A combination of densely scattered hedgerow trees, dense lines of trees along watercourses and locally prominent parkland and amenity trees, results in a well-wooded landscape. Not only does this woodland restrict views through and from this landscape, it plays a key role in defining the scale and enclosure of the intervening spaces.

The land-use is that of mixed farming, with pasture prevalent in parkland, where the soils are heaviest or the slopes are locally steep. Where farming is less intensive, patches of unimproved grassland persists.

Settlement is sparsely scattered throughout, occurring as small settlements with some roadside cottages, or scattered estate farmsteads built in the local vernacular materials of sandstone or red brick with blue clay tile roofs.

LANDSCAPE TYPE: WOODED ESTATELANDS

Planting and Management Guidelines

A well wooded estate landscape of densely scattered small plantations with dense hedgerow and watercourse trees, and localised amenity tree groups including parkland trees.
All of this landscape character type lies within the National Forest.

| | |
|------------------------------------|---|
| Primary woodland character: | Densely scattered small plantations. |
| Primary tree character: | Densely scattered hedgerow and dense watercourse trees and localised amenity tree groups. |
| Woodland vision: | Refer to the National Forest Strategy and Guidance. |
| Tree vision: | Densely scattered hedgerow and dense watercourse trees and localised amenity tree groups. |

Typical woodland size range: Refer to the National Forest Strategy and Guidance

Woodland pattern: Refer to the National Forest Strategy and Guidance

- Conserve and restore all ancient woodland sites and restock with locally occurring native species.
- Promote linked extensions to ancient woodland by natural regeneration and planting.
- Ensure the use of indigenous tree and shrub species, including a proportion of large, long lived species.
- Re-establish and enhance physical links between existing isolated woodland and hedgerows.
- 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.
- Conserve and renew ornamental plantations and individual parkland trees.
- Ensure the conservation and management of mature/veteran trees within hedgerows.
- Refer to National Forest Strategy and Guidance

LANDSCAPE TYPE: WOODED ESTATELANDS

Woodland Species Mix

Neutral/slightly acidic soils

Primary Tree Species 50%

| | |
|-----------------------------|-----------------|
| # <i>Fraxinus excelsior</i> | Ash |
| # <i>Quercus robur</i> | Pedunculate Oak |

Secondary Tree Species 20%

Major

| | |
|------------------------|-------------|
| <i>Acer campestre</i> | Field Maple |
| <i>Ilex aquifolium</i> | Holly |

Minor

| | |
|-------------------------|-------------------|
| <i>Malus sylvestris</i> | Crab Apple |
| <i>Populus tremula</i> | Aspen |
| <i>Sorbus aucuparia</i> | Rowan |
| <i>Tilia cordata</i> | Small Leaved Lime |

Shrubs 10-30%

Major

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

Minor

| | |
|---------------------------|-------------------|
| <i>Prunus spinosa</i> | Blackthorn |
| <i>Rhamnus cathartica</i> | Purging Buckthorn |
| <i>Salix cinerea</i> | Grey Willow |

Open Space 0-20%

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

Amenity Trees - tree species most appropriate for planting as amenity trees associated with settlement, or other locally occurring large woodland species.

* Plant only **native** Black Poplar (sub species *betulifolia*). Contact Derbyshire Wildlife trust for information.

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>Fraxinus excelsior</i> | Ash |

Minor

| | |
|-------------------------|-----------------|
| * <i>Populus nigra</i> | |
| <i>ssp. betulifolia</i> | Black Poplar |
| <i>Quercus robur</i> | Pedunculate Oak |
| <i>Salix caprea</i> | Goat Willow |

Shrubs 10-30%

Major

| | |
|-----------------------|-------------|
| <i>Salix cinerea</i> | Grey Willow |
| <i>Sambucus nigra</i> | Elder |

Minor

| | |
|---------------------------|-------------------|
| <i>Crataegus monogyna</i> | Hawthorn |
| <i>Frangula alnus</i> | Alder Buckthorn |
| <i>Rhamnus cathartica</i> | Purging Buckthorn |
| <i>Salix viminalis</i> | Osier |
| <i>Viburnum opulus</i> | Guelder Rose |

Open space 0-20%

Hedgerow Species Mix

Suitable hedgerow plants

Primary 80-90%

| | |
|---------------------------|----------|
| <i>Crataegus monogyna</i> | Hawthorn |
|---------------------------|----------|

Secondary 10-20%

| | |
|-------------------------|-------------|
| <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>Rhamnus cathartica</i> | Purging Buckthorn |
|---------------------------|-------------------|

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 |
| <i>Tilia cordata</i> | Small Leaved Lime |

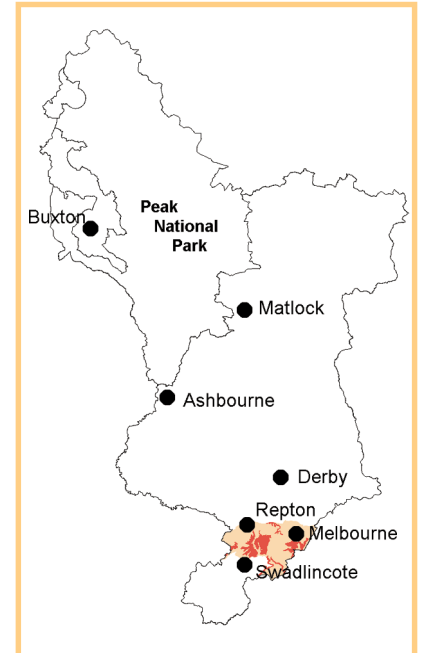
Occasional 0-5%*

| | |
|-------------------------|------------|
| <i>Malus sylvestris</i> | Crab Apple |
| <i>Populus tremula</i> | Aspen |
| <i>Sorbus aucuparia</i> | Rowan |

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

LANDSCAPE TYPE: SANDSTONE SLOPES AND HEATHS

A landscape of moderate to steep sandstone slopes with prominent rounded undulations and hillocks forming the upper slopes. Predominantly a pastoral landscape. Small linear woodlands and scattered hedgerow trees give the sense of a well-wooded landscape.



Key Characteristics

- Prominent landform of moderate to steeply sloping sandstone valleys and slopes with rounded undulations along the slopes
- 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
- Prominent woodland with small linear woodlands, scattered hedgerow trees, scrub and occasional parkland trees
- Medium to large size regular and sub-regular fields with mixed species hedgerows
- Sparsely settled landscape with the very occasional red brick and clay tile farmstead and estate cottage

Geology & 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 west facing slopes, has created a series of visually prominent rounded undulations and hillocks.

Soils & 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 readily absorb winter rainfall even on the steepest slopes.

The light sandy soils are easily worked and lend themselves to arable cropping. However, where the slopes are moderately steep permanent grassland prevails, whilst the very steepest slopes are wooded. Water retention is poor and areas under arable production need regular irrigation during the summer months. Topsoils can dry out very quickly and in cropping areas can be prone to wind erosion. Where

steep slopes have been cultivated then these are especially susceptible to erosion.

Ecology

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

A key habitat type is woodland, which is also a visually prominent feature. On the steeper upper slopes, where land is less cultivable, woodland prevails, tending to be linear, following the natural contours of the sandstone valleys and slopes. Ecological value is diminished slightly by the mixed species composition, often including many non-native

species. Coniferous species are also planted, particularly Scots Pine, which thrives in these free draining soils.

Ecological corridors are variable, depending to some extent upon enclosure patterns and land-use. In areas of smaller, irregular fields the hedgerows tend to be mixed species with holly, hazel and blackthorn. In areas of mixed farming and larger fields the hedgerow network is more fragmented and is beginning to lose its ecological function.

Large mature hedgerow trees and the occasional parkland tree add to the ecological diversity particularly when oak is dominant.

Tree cover

Tree cover is a prominent feature within this landscape and some areas have the sense of being well wooded. Small woodland blocks tend to hug the upper, steeper slopes and are often linear in shape, following the natural contours of slopes and valleys. These wooded slopes are further supplemented by scrub colonisation in areas of neglected pasture.

There are scattered boundary trees along hedgerows, sparsely scattered in areas of mixed farming, that tend to be a mix of oak and ash. Where the occasional stream dissects the slope there is usually a

continuous line of trees with willow and alder but also the infrequent ash. In some areas, particularly around Repton and Foremark, there are remnant features of former deer parks, such as the park pale with ditch and bund demarcating former boundaries.

The overall character is one of a well-wooded landscape, with views through the landscape and along the slopes often blocked or filtered, mainly by trees and woodlands but also the rounded undulations of the landform. However, views out across adjacent landscape types can be extensive, and sometimes enhanced by the woodland frame.

Enclosure

The enclosure pattern is generally on a medium to large scale although there is some variation in field shape throughout this landscape type. Predominantly fields tend to be medium to large size and regular in outline, being more visually prominent in areas of mixed farming. On steeper slopes, where traditionally woodland is more prevalent, fields may be smaller in size and more irregular and semi-regular in shape.

Where the enclosure pattern is on a smaller scale hedgerows have a more diverse composition of species like holly, hazel, elder, blackthorn and hawthorn. The

more regular fields are predominantly hawthorn with some elder. The field pattern is never more than moderately apparent, visually, and more often than not it is the small woodlands and hedgerow trees which assist in defining more open areas.

Transport

Lanes through this landscape are infrequent and often restricted to a single route running through valley bottoms or on gentler lower slopes. When the occasional lane runs up slope it is invariably winding with irregular width verges and often sunken.

Built Environment

Traditionally settlement is sparse, primarily due to the predominance of steep, uncultivable slopes. Some isolated slopes are totally uninhabited whilst others are only sparsely settled with an occasional farmstead and cottage. The traditional building materials are sandstone or red brick with Staffordshire blue clay tile roofs.

Today this sparsely scattered character is still obvious but development pressures are beginning to increase to the south of Repton and on the slopes to the east of Burton-on-Trent. Other urban impacts are few with the exception of Foremark Reservoir, which covers a sizeable area of one of these sandstone valleys.

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 these steep valley sides and slopes, and differential erosion of the slopes themselves has created visually prominent rounded undulations and hillocks, most obvious on the west facing slopes.

Being difficult to farm, many of these slopes are now well wooded, either by natural colonisation or through the planting of mixed species plantations. The woodlands are small in size and linear, following the natural contours of these valley sides and slopes. Together with scattered hedgerow trees, occasional parkland trees and watercourse trees, the overall impression is that of a well wooded landscape. 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.

Land-use is variable, depending upon the steepness of the slopes. The predominant land-use is pasture with some mixed farming and arable on the gentler slopes. Where the pasture remains less intensive then there are extensive patches of acid grassland, and indeed when the pasture has become more neglected, localised patches of gorse have developed. 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 tile roofs.

LANDSCAPE TYPE: SANDSTONE SLOPES AND HEATHS

Planting and Management Guidelines

Moderate to steeply sloping pastoral landscape with scattered linear plantations and hedgerow trees.
Part of this landscape character type lies within the National Forest.

Primary woodland character: Densely scattered small woodlands

Primary tree character: Thinly scattered hedgerow trees and dense watercourse trees.

**Woodland vision
(Outside the National Forest):** Densely scattered small woodlands.
Note approximately 75% of this area is within the National Forest.
Where appropriate refer to the National Forest Strategy and Guidance.

Tree vision: Thinly scattered hedgerow and dense watercourse trees.

Typical woodland size range: 0.5 - 10 ha small

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.
- National Forest Strategy and Guidance applies for the area within the National Forest.

LANDSCAPE TYPE: SANDSTONE SLOPES AND HEATHS

Woodland Species Mix

Neutral/slightly acidic soils

Primary Tree Species 50%

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

Secondary Tree Species 20%

Major

| | |
|------------------------|-------------|
| <i>Acer campestre</i> | Field Maple |
| <i>Ilex aquifolium</i> | Holly |

Minor

| | |
|-------------------------|-------------------|
| <i>Malus sylvestris</i> | Crab Apple |
| <i>Populus tremula</i> | Aspen |
| <i>Sorbus aucuparia</i> | Rowan |
| <i>Tilia cordata</i> | Small Leaved Lime |

Shrubs 10-30%

Major

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

Minor

| | |
|---------------------------|-------------------|
| <i>Prunus spinosa</i> | Blackthorn |
| <i>Rhamnus cathartica</i> | Purging Buckthorn |
| <i>Salix cinerea</i> | Grey Willow |

Open Space 0-20%

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

* Plant only **native** Black Poplar (sub species betulifolia). Contact Derbyshire Wildlife trust for information.

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>Fraxinus excelsior</i> | Ash |

Minor

| | |
|-------------------------|-----------------|
| * <i>Populus nigra</i> | |
| <i>ssp. betulifolia</i> | Black Poplar |
| <i>Quercus robur</i> | Pedunculate Oak |
| <i>Salix caprea</i> | Goat Willow |

Shrubs 10-30%

Major

| | |
|-----------------------|-------------|
| <i>Salix cinerea</i> | Grey Willow |
| <i>Sambucus nigra</i> | Elder |

Minor

| | |
|---------------------------|-------------------|
| <i>Crataegus monogyna</i> | Hawthorn |
| <i>Frangula alnus</i> | Alder Buckthorn |
| <i>Rhamnus cathartica</i> | Purging Buckthorn |
| <i>Salix viminalis</i> | Osier |
| <i>Viburnum opulus</i> | Guelder Rose |

Open space 0-20%

Hedgerow Species Mix

Suitable hedgerow plants

Primary 70-75%

| | |
|---------------------------|----------|
| <i>Crataegus monogyna</i> | Hawthorn |
|---------------------------|----------|

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>Rhamnus cathartica</i> | Purging Buckthorn |
|---------------------------|-------------------|

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 |
| <i>Tilia cordata</i> | Small Leaved Lime |

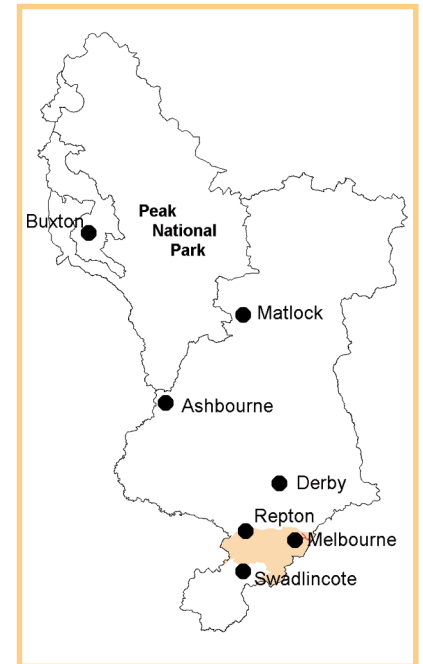
Occasional 0-5%*

| | |
|-------------------------|------------|
| <i>Malus sylvestris</i> | Crab Apple |
| <i>Populus tremula</i> | Aspen |
| <i>Sorbus aucuparia</i> | Rowan |

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

LANDSCAPE TYPE: RIVERSIDE MEADOWS

Narrow, flat flood plains, containing meandering rivers and streams with dense trees along riverbanks. A mixed farming landscape of generally medium sized hedged fields.



Key Characteristics

- Flat floodplains containing meandering rivers and streams
- Seasonally waterlogged soils over alluvium
- Traditional pasture now reverted to intensive mixed farming
- Localised patches of rushes in damp hollows
- Dense trees along watercourses; widespread willow and alder
- Regular shaped fields bounded by hawthorn hedges
- Lanes along side or crossing floodplain

Geology and Landform

The underlying sediment of these flat floodplains 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 by the deposition of sediment by waning floodwaters. The floodplain of the Ramsley Brook and Carr Brook are fairly narrow but broaden slightly at the confluence with the Trent Valley.

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 mixed farming with pasture still evident on the heaviest soils and lowest lying fields.

Intensification of farming in the surrounding landscapes has transgressed onto the floodplains and with improved drainage there is an increasing shift towards arable farming.

Ecology

The narrow Ramsley Brook flows with unpolluted water, making it very valuable as a freshwater habitat. All watercourses are important wildlife habitats, as are their banks and margins. Pasture

with a high water table, where the soil is permanently wet, is important ecologically for species-rich flora, ground beetles and birds such as curlew and snipe. However these habitats are becoming increasingly rare, as former pastures have often been converted to arable following drainage improvements. Some sections of Ramsley Brook have been canalised and as a consequence their biodiversity value has diminished.

Improved drainage, conversion to arable and localised culverting is leading to a significant loss of meadowland.

Tree Cover

There are dense lines of trees along the riverbanks, mainly alder and willows. In most instances it is the dense tree line that defines the river course rather than the stream itself.

Enclosure

Fields are medium 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.

Transport

The lanes and major roads tend to run along the edge of the floodplain, raised on embankments, that minimise the risk of flooding. There are very occasional crossing points, like that at New Bridge.

Built Environment

Historically there was little built development on the floodplain, excepting the occasional water mill for grinding corn. There are occasional farmsteads on the higher, better drained sections. Because of their unsuitability for built development some floodplain meadows 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 is a narrow, flat, river meadow landscape characterised by a narrow alluvium floodplain associated with the Ramsley Brook and Carr Brook, which eventually discharge into the River Trent at Kings Newton. Traditionally grazing pasture, the land-use is now defined by a mixed agricultural system with a distinct shift towards arable cropping in recent years.

The flood plain remains fairly open with relatively distant views along the valley. Trees tend to be scarce, other than the dense line of riparian trees, a mix of alder and willow, that define the river corridor.

Fields tend to be medium sized and sub-regular in shape, enclosed by hawthorn hedgerows, many of which are gappy and neglected. Some hedgerows have been removed as a result of agricultural intensification and field amalgamation.

The floodplains remain largely unsettled although there is the occasional former mill that would have harnessed water power. As a result transport routes are also scarce, other than the occasional river crossing. A single railway line impinges on the floodplain immediately south of New Bridge.

Ridge and furrow add local distinctiveness to the river meadows.

Changes to improved pasture and arable through the introduction of drainage schemes, are threatening the inherent character of these riverside meadows.

LANDSCAPE TYPE: RIVERSIDE MEADOWS

Planting and Management Guidelines

An open floodplain 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 | small |
| 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.

LANDSCAPE TYPE: RIVERSIDE MEADOWS

Woodland Species Mix

Waterlogged conditions
on all soil types

Primary Tree Species 50%

- + *Alnus glutinosa* Alder
- + *Salix fragilis* Crack Willow

Secondary Tree Species 20%

Major

- Betula pubescens* Downy Birch
- Fraxinus excelsior* Ash

Minor

- * *Populus nigra*
- ssp. betulifolia* Black Poplar
- Quercus robur* Pedunculate Oak
- Salix caprea* Goat Willow

Shrubs 10-30%

Major

- Salix cinerea* Grey Willow
- Sambucus nigra* Elder

Minor

- Crataegus monogyna* Hawthorn
- Frangula alnus* Alder Buckthorn
- Rhamnus cathartica* Purging Buckthorn
- Salix viminalis* Osier
- Viburnum opulus* Guelder Rose

Open space 0-20%

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

* Plant only **native** Black Poplar (sub species betulifolia). Contact Derbyshire Wildlife trust for information.

Hedgerow Species Mix

Suitable hedgerow plants

Primary 85-100%

- Crataegus monogyna* Hawthorn

Occasional 0-15%

- Prunus spinosa* Blackthorn
- Acer campestre* Field Maple

Suitable hedgerow trees

Primary 70-75%

- Fraxinus excelsior* Ash
- Quercus robur* Pedunculate Oak

Secondary 25-30%

- Acer campestre* Field Maple
- Tilia cordata* Small Leaved Lime

Occasional 0-5%*

- Malus sylvestris* Crab Apple
- Populus tremula* Aspen
- Sorbus aucuparia* Rowan

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