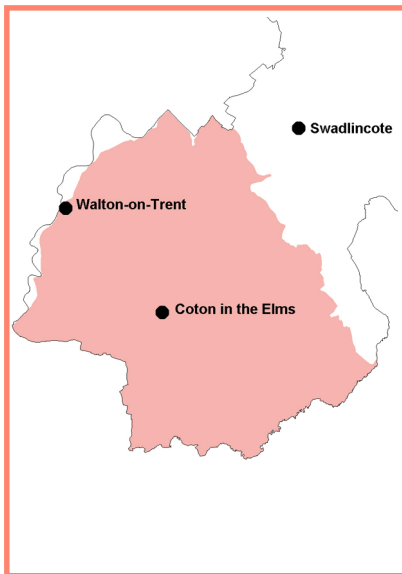


MEASE/ SENCE LOWLANDS

CHARACTER AREA 72

A gently rolling agricultural landscape with scattered villages and occasional country houses



Location of Mease/ Sence Lowlands

Introduction

The Mease/Sence Lowlands lie at the southern most limits of Derbyshire, being bordered to the west by the Trent Valley and to the north and east by the South Derbyshire Coalfield. It is an area of typical rolling lowland becoming almost flat around the River Mease which forms the county boundary to the south.

Much of the area remained in open field cultivation until the 18th and 19th centuries until it was finally enclosed into the regular field patterns that are still evident today. The area is predominantly an open agricultural landscape with small copses and spinneys on ridges with occasional trees scattered along watercourses. Woodland is most apparent in association with parkland scattered through the area, as at Catton Park and Grangewood Park.

Villages, like Coton-in-the-Elms and Lullington, generally located

Landscape Character Types

- Village Estate Farmlands
- Riverside Meadows

"...this extreme southern limit of the county, is generally gently rolling and park-like, with a fair scattering of copses for fox coverts...."
p57 Roy Christian 'Derbyshire'

on the minor ridgelines, are a prominent feature of this Character Area. The traditional building material is red brick with Staffordshire blue clay tile roofs. A spired church is often a focal point within the village and in the wider landscape.

Only adjacent to Burton-on-Trent has there been any significant post-war development. The villages retain a largely remote and rural character. Power lines and pylons extending from the power stations in the Trent Valley are the only other visually significant man-made features in the area, generally detracting from the rural scene.

Physical Influences

The area is dominated by the Triassic Mercia Mudstones that give rise to productive, reddish clay soils. There are outcrops of Triassic sandstone extending southwards and westwards from the coalfield, supporting free-draining sandy soils. The overall landform, defining the *Village Estate Farmlands*, is that of gently rolling lowland with minor ridges and shallow valleys. The River Mease, flowing through *Riverside Meadows*, drains the South Derbyshire Coalfield westwards into the River Tame. Smaller streams in the north drain directly into the Trent and carve out a locally undulating landform.



Natural Influences

Due to the productivity of the soils, most of the land is in intensive agricultural use and as a result contains very few semi-natural habitats. Many hedgerows have now been removed to create larger fields and hedgerow trees, mainly ash and oak, are only sparsely scattered through the remainder. Within the *Village Estate Farmlands* there are extensive areas of intensive arable farming with low hedgerows and few trees. Where the ground 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 small and intermittent woodlands, comprising spinneys, copses and game coverts, planted on ridges to create a well-treed character to some areas. Country house parks have been encroached upon and parkland trees, often in poor condition, can be seen within farmland.

There are often willows and alders along minor streams and within the *Riverside Meadows* of the River Mease. The ecological value of the river Mease is reflected in its status as a candidate for the designation, Special Area of Conservation (SAC).

Human Influences

There is scattered evidence of Neolithic and Bronze Age activity in the area from finds and sites, although this appears to relate to activity spreading out from the Trent and Tame valleys. There was certainly clearance and occupation during the Iron Age and Roman periods. The many place names ending in 'ton', the lack of woodland names and the occasional references to heath indicate that the area has a long history of settlement from an early date.

By the time of the Domesday Book settlement was widespread, if rather sparse. The landscape was one of evenly distributed villages, usually on the minor ridges, set in and overlooking open fields. 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 a component of the *Village Estate Farmlands* today.

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 farms were built in the newly enclosed fields and were sometimes given names, such as Botany Bay, that reflect events of the day. Industrial development

largely passed the area by, although the imposition of power stations within the Trent Valley, and the associated pylons and power lines, has a significant visual impact in this open landscape. The main impacts relate to 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 *Village Estate Farmlands* are a mellow red brick with Staffordshire blue clay tile roofs. Some local sandstones were used for high status buildings and architectural detailing. The villages in the area remain essentially rural in character, connected by straight enclosure roads.

This Character Area within Derbyshire lies within the National Forest and will be subject to large scale woodland planting allied to other landscape and habitat enhancement.

Other Considerations

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

LANDSCAPE TYPE: VILLAGE ESTATE FARMLANDS

This is a well ordered, gently rolling agricultural landscape punctuated by discrete villages, scattered estate farmsteads and country houses. There are small game coverts and dense lines of trees along watercourses.



Key Characteristics

- Broad scale gently rolling lowland landscape
- Seasonally waterlogged fine loamy soils over Permo-Triassic mudstone
- Mixed farming with intensive cropping and improved permanent pasture
- Small discrete broadleaf plantations and game coverts
- Tree lined, pastoral stream corridors
- Medium to large regular and sub regular fields with mainly hawthorn hedgerows
- Winding country lanes with wide grass verges
- Small hilltop villages often with prominent church spire

Geology and Landform

This is a landscape underlain with Permo-Triassic mudstones and clay shales, easily eroded, thus giving rise to a subdued, rounded and gently rolling landform. Small streams have created shallow valleys.

Soils and Land Use

The soil association is typical of those developed on thin drift over Permo-Triassic mudstone or clay shales. The soils form a mosaic of neutral to base rich brown earths that are subject to some seasonal waterlogging.

The land-use is typically mixed farming but with good management and some underdrainage the land grows moderately good crops and cereals. Ley grassland usually forms part of the crop rotation, so that cattle and sheep are an integral part of the farming system.

Ecology

The Mease Lowlands is primarily an agricultural landscape and most of its habitats are associated with farmland. Unimproved pasture is the most important habitat type, often in association with features like

hedgerows and field ponds. Streamlines are also important as wildlife corridors, forming a network of linked sites that are lined by dense tree belts of alder and willow with the occasional ash. The terrestrial network is further enhanced by numerous hedgerow boundaries, although many of these are over-managed or have suffered loss due to removal.

Remnant unimproved grassland persists in many of the wide road verges throughout this landscape character type. Their value is unfortunately diminishing due to a lack of management, which is allowing the encroachment of bramble and scrub. Patches of unimproved grassland still persist around some of the villages and along the minor stream valleys. Woodland is a feature of this landscape, if not particularly prominent. The wildlife value of these woodlands is primarily as shelter for birds and mammals as many of the trees, including species like chestnut, are non native.

Tree Cover

Tree cover patterns are variable relating mainly to the intensity of agriculture. There is an estate influence in the small ornamental

plantations scattered throughout and the occasional specimen tree. Many of the woodlands tend to be small with regular shaped outlines, and a variable species composition including chestnut, lime, oak and redwood.

Hedgerow trees, usually ash and oak, are sparsely scattered through the landscape. They are more abundant in areas of pasture although never a visually prominent feature. Along the minor streams that dissect this landscape type there are dense continuous lines of trees, predominantly alder and willow with the occasional ash.

Specimen trees occur in areas of former parkland around country houses and locally prominent amenity trees around some farms and villages.

The general absence of trees allows for some views through the landscape. The village church often appears as a focal point to these. However, long distance

views out to other landscapes tend to be limited by lack of elevation and suitable vantage points.

Enclosure

This is a landscape that owes much of its character to the enclosure, by Parliamentary Act or agreement, of former open fields. As a result the enclosure pattern is defined by large to medium size regular and sub-regular fields with hawthorn hedgerows. Many of these hedgerows are kept closely cropped and are now becoming gappy with little current stock control function. There are pockets of earlier enclosure around the villages and adjacent to ancient lanes, which tend to be smaller scale and have more mixed species hedgerows. This is a well-ordered landscape of open views and quiet rural character.

Transport

There is a network of winding country lanes connecting villages and sparsely scattered farmsteads. Many lanes have wide grassy verges, becoming increasingly overgrown with scrub.

Built Environment

Nucleated villages, occupying locally higher ground, are dotted around this rolling lowland landscape. The characteristically tall church spires of village parish churches punctuate the skyline. Traditional building materials are red brick with Staffordshire blue clay tile roofs.

Between villages there are scattered, large, red brick farm complexes, characteristic of estate properties, and occasional country houses like Caldwell Hall and Grangewood Hall.

The once extensive surviving ridge and furrow in this area is now much reduced due to agricultural intensification.

Summary

This is a gently rolling, lowland agricultural landscape characterised by intensive arable farming. Underlying mudstones give rise to a gently rolling landform and base rich soils that can be easily improved, making them easily cultivable and ideal for farming.

The arable land-use is a key characteristic as is the field pattern, which owes much to its enclosure by Parliamentary Act and agreement. The resultant fields tend to be large in size and regular in shape with hawthorn hedgerows. With the intensification of agriculture, the cultural patterns are now being eroded. Some hedgerows have been removed or become gappy due to poor management.

Punctuating this essentially agricultural landscape there are small villages like Coton-in-the-Elms, Lullington and Netherseal, together with small plantation woodlands and game coverts. Nucleated villages are another key feature of this landscape with prominent, tall, church spires.

Woodlands are not visually prominent but they reflect the underlying estate character as small-scale plantations or game coverts, often containing many non-native and ornamental species. The estate character is reinforced by occasional parkland trees associated with the country houses scattered through the landscape and large estate farm complexes. Hedgerow trees are sparse throughout, usually associated with areas of pasture and are generally in decline due to the intensification of agriculture. Trees are visually more apparent in the lower lying valleys associated with narrow stream corridors.

LANDSCAPE TYPE: VILLAGE ESTATE FARMLANDS

Planting and Management Guidelines

Gently rolling agricultural landscape punctuated by thinly scattered small plantations with dense watercourse trees. All of this landscape character type is within the National Forest.

Primary woodland character:	Thinly scattered small plantations
Primary tree character:	Thinly scattered hedgerow and dense watercourse trees
Woodland vision:	Refer to the National Forest Strategy and Guidance
Tree vision:	Thinly scattered hedgerow and dense watercourse trees

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

- 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.
- Conserve and renew ornamental plantations and individual parkland trees.
- Refer to National Forest Strategy and Guidance

LANDSCAPE TYPE: VILLAGE ESTATE FARMLANDS

Woodland Species Mix

Neutral/base rich 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.

* Plant only **native** Black Poplar (sub species betulifolia). Contact Derbyshire Wildlife Trust for more 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* Black Poplar
ssp. betulifolia
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

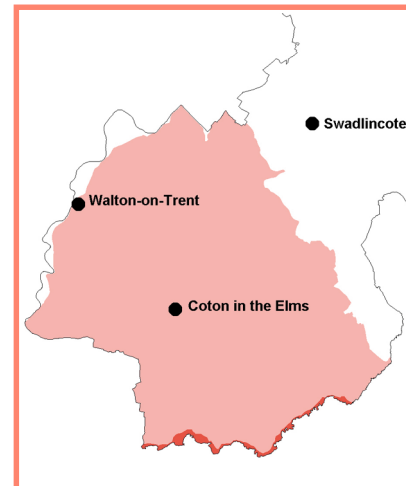
Occasional 0-5%*

Malus sylvestris Crab Apple
Populus tremula Aspen
Sorbus aucuparia Rowan

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

LANDSCAPE TYPE: RIVERSIDE MEADOWS

A narrow, flat flood plain, containing a tightly meandering river with scattered trees along riverbanks, including some willow pollards.
A pastoral landscape of generally small, regular hedged fields.



their species-rich flora, ground beetles and birds such as curlew and snipe. These habitats are becoming increasingly rare, as former pastures have often been converted to arable following drainage improvements. However, there are a few remaining fields that remain unimproved and as a consequence retain some ecological value.

Key Characteristics

- Flat floodplains containing tightly meandering river
- Seasonally waterlogged soils over alluvium
- Moderate intensity permanent pasture
- Localised patches of rushes in damp hollows
- Scattered locally dense trees along watercourses; widespread alder and willow
- Regular shaped fields bounded by predominantly hawthorn hedges
- Lanes alongside 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.

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 pasture and 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 lowest levels as a result of recent drainage improvements and flood protection measures.

Ecology

The River Mease is relatively unpolluted making it very valuable as a freshwater habitat. Additional ecological value relates to the river banks and margins particularly associated with riparian trees.

Pasture with a high water table and where the soil is permanently wet are important ecologically for

Tree Cover

There are scattered, locally dense, lines of trees along the riverbanks, mainly alder but with occasional willows.



Some willows have been pollarded and these form visually distinctive features associated with the floodplain. Many trees have been removed from the riverbanks as part of flood protection works and there is die back in other places.

There are very few other trees associated with hedgerows.

Enclosure

Fields are small and of regular shape; the larger fields being found in the lower river valleys. Many boundaries are comprised of tall and gappy hawthorn hedgerows, some neglected. The hedgerows that demarcate the edge of the floodplain remain well defined and include many more species such as hazel, blackthorn and holly.

Transport

Lanes and major roads tend to run along the edge of the floodplain, raised on embankments, to avoid the risk of flooding.

Occasionally roads cross the valleys, on small red brick bridges over the rivers.

Built Environment

Historically there was little built development on the floodplain, excepting the occasional water mill for grinding corn constructed from red brick with a clay tile roof.

Summary

This is a narrow flat river meadow landscape characterised by a narrow alluvium floodplain associated with the River Mease. 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. Occasional willow pollards form visually distinctive features.

Fields tend to be small sized and 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 mill that would have harnessed the power of the stream. As a result transport routes are scarce excepting the occasional river crossing.

The intensification of agriculture and conversion to arable following drainage schemes, is threatening the inherent character of these riverside meadows.

LANDSCAPE TYPE: RIVERSIDE MEADOWS

Planting and Management Guidelines

An open floodplain with dense watercourse trees.
All of this landscape character type is within the National Forest.

Primary woodland character:	Unwooded
Primary tree character:	Dense watercourse trees.
Woodland vision:	Refer to the National Forest Strategy and Guidance
Tree vision:	Dense watercourse trees.
Typical woodland size range:	Refer to the National Forest Strategy and Guidance
Woodland pattern:	Refer to the National Forest Strategy and Guidance

- 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.
- Refer to National Forest Strategy and Guidance.

LANDSCAPE TYPE: RIVERSIDE MEADOWS

Woodland Species Mix

Tree and Shrub Species Mix

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* Black Poplar
- 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 more information.

Hedgerow Species Mix

Suitable hedgerow plants

Primary 85-100%

- Crataegus monogyna* Hawthorn

Occasional 0-15%

- 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