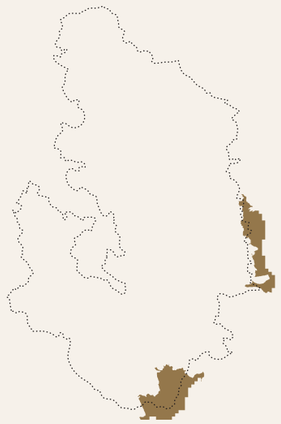
The Derbyshire Peak Fringe

Looking towards Minninglow © Peak District National Park Authority

Introduction

The Derbyshire Peak Fringe has an intermediate character and occupies a transitional zone, between the uplands of the Peak District to the north and west and the rural lowlands of Derbyshire with small parts of North Staffordshire to the south and east. The eastern parts are strongly influenced by settled areas to the east associated with the urban centres of Chesterfield and Sheffield. There is particular association with the historical coal mining and iron making industries of the settlements. The region has a distinctly undulating topography and contains the upper part of the River Dove.



Physical influences

The physical structure of the Derbyshire Peak Fringe is strongly influenced by the underlying geology, which comprises a sequence of rock types along the southern and the lower eastern flank of the Derbyshire Dome and in the south rock types associated with the Widmerpool Gulf. This gives rise to a mixed geology around Parwich and Tissington comprising a mixture of banded shales and limestones, with very limited outcrops of gritstones belonging to the Millstone Grit series. The Bowland Shale formation also outcrops and consists of a mixture of shales, siltstones and sandstones. There are a variety of limestones in this area; Widmerpool formation predominates consisting of a mixture of limestones and shales. Also evident are Hopedale limestones, Milldale limestones and Bee Low limestones which provide local variations in geology. Around Tissington there is a discrete patch of volcanic geology known as the Tissington Volcanic Member, which contains hydrated tuff-like breccia. This southern area of the Derbyshire Peak Fringe consists of rolling uplands with steep sided valleys and broad floodplains in places.

East from Holymoorside and northwards to Totley the shales give way to a mixture of Millstone Grit and Coal Measures along the eastern fringe of the Derbyshire Dome. This consists of an undulating, in places steeply sloping, topography with steep valley sides created by moorland streams that have eroded through the softer geology and carry water drained off the moorland upland in the west down to rivers like the Rother. A major part of this area is underlain by gritstones and shales belonging to the Millstone Grit series, which have been eroded to produce a distinctly undulating topography. The upstanding, higher ground tends to be formed from gritstone, while the valleys and other lower lying areas are cut into the underlying, softer shales. These beds pass beneath the more rolling Coal Measures that lie along the eastern edge of the Derbyshire Peak Fringe. The Coal Measures consist of inter bedded grey shales, siltstones and sandstones with subordinate amounts of coal and ironstone. The coal and ironstone have all influenced the development of settlements such as Sheffield and Chesterfield as industrial settlements.

Ecological influences

The soils in the Derbyshire Peak Fringe are variable, reflecting differences in the underlying bedrock and the presence of glacial and alluvial drift deposits, particularly in the south. Shallow mineral soils can be found on the gritstone hills and slopes; these tend to produce agriculturally poor pasture land dominated by woodland and rough or permanent pasture. Seasonally waterlogged, gleyed soils overlie the shale beds on lower lying land, where they are used for improved permanent pasture. Occasional deposits of fine loamy soils, derived from till deposited during the last ice age, produce some higher quality pasture and occasional arable fields. Deep, loamy and clayey soils have developed on alluvial deposits on the southern valley floors.

Deciduous ancient semi-natural woodlands are a prominent feature on the steep slopes. Around Holymoorside and north towards Chesterfield the woodlands tend to be upland oakwoods, supporting pedunculate and sessile oaks along with a hybrid of the two. Other tree species present in these upland woods include downy and silver birch, rowan, holly and hazel. These woods can also support honeysuckle and bluebells and are important for bat species and birds, including the redstart which uses holes in trees for nesting sites. Lower woodlands in the south of the area support ash, birch and hazel intermixed. Alder and willow are key tree species in wetter areas. On flushed slopes, woodlands can support a range of mosses, sedges, ferns and horsetails. Wet woodlands on floodplains support a range of ground flora, including meadowsweet, nettle, marsh marigold and large bitter-cress.

The sloping land tends to support permanent pasture and some rough grazing. In thin soils in more upland locations acid grassland predominates and can support harebells, heath bedstraw, and tormentil along with occasional patches of gorse, bilberry and heather. Improved agricultural land on these lower slopes can have limited ecological diversity, however, where hay meadows are remaining these can support a range of grass species mixed with flowering species including bird's foot trefoil, oxeye daisy, knapweed, self-heal and ribwort plantain. Grasslands in association with the ridge and furrow topography round Parwich and Tissington can be particularly diverse. Verges, when infrequently managed, can be flower rich and include species such as red campion, meadow cranesbill and knapweed.

Wet pasture and hay meadows on lower slopes and on floodplains contain various rushes and sedges, meadowsweet and ragged robin and often support small populations of breeding birds such as snipe. The pastoral farmland, including species rich hedges, supports a wide range of bird species including yellowhammer, skylark, linnet and goldfinch.

Human Influences

There is a very variable settlement pattern within the Derbyshire Peak Fringe. Nucleated villages, such as Tissington, Brassington and Bradbourne are features of the more productive land in the south of the area. These settlements are often associated with a scattering of farms and roadside dwellings nearby; in more dissected areas and on steeper slopes to the south, there are higher numbers of scattered farmsteads. Tissington, although similar to the other settlements in form, has the added influence of the estate associated with Tissington Hall. Villages are found both in valley bottoms, such as Parwich, and on broad ridgetops, such as at Bradbourne, and are often medieval in origin. The location of former open fields around settlements can often be clearly seen in the remaining ridge and furrow and fossilised strip field systems. Much of the enclosure in the southern fringe area is of piecemeal character, and of uncertain date.

On the higher land, in the dissected areas south-west of Sheffield and west of Chesterfield, pastoral agriculture and early industrial activity were the predominant land uses. Here there is a mixture of scattered farmsteads, hamlets and small traditional villages with occasional modern housing development. Although many places have medieval origins, with the exception of some churches, most buildings existing today date from the 17th century onwards when stone became a more commonly available building material. The predominant traditional vernacular building material in the Derbyshire Peak Fringe is gritstone with stone or Welsh slate roofs. Where the Derbyshire Peak Fringe abuts the White Peak there is often a mixture of limestone and gritstone buildings with stone, slate, or clay tiled roofs reflecting the changing geologies.

The area west of Chesterfield has long been important for industry. Industries here frequently had medieval origins but most increased in scale and impact from the 17th century onwards. There were many local coal mines with shallow workings at various seams. From the 19th century onwards coal mining gradually migrated eastwards away from the Derbyshire Peak Fringe as the coal seams that were being mined ran deeper underground. Local coal supported lead smelting particularly from the 18th century onwards. Other mining included that for fireclay, ganister and ironstones which supported the iron and later the steel industries. There were many lead and iron smelting hearths in the landscape from the 16th century onwards, together with manufacturing sites for early iron tools and implements. These took advantage of the extensive local woodlands which were coppiced for charcoal and white coal (kiln dried wood), the latter used specifically for lead smelting. Many of the woodlands have earthworks at the sites of earthen kilns for charcoal and white coal production. The vestiges of mining, smelting hearths and a variety of small industrial workshops and mills remain in places.

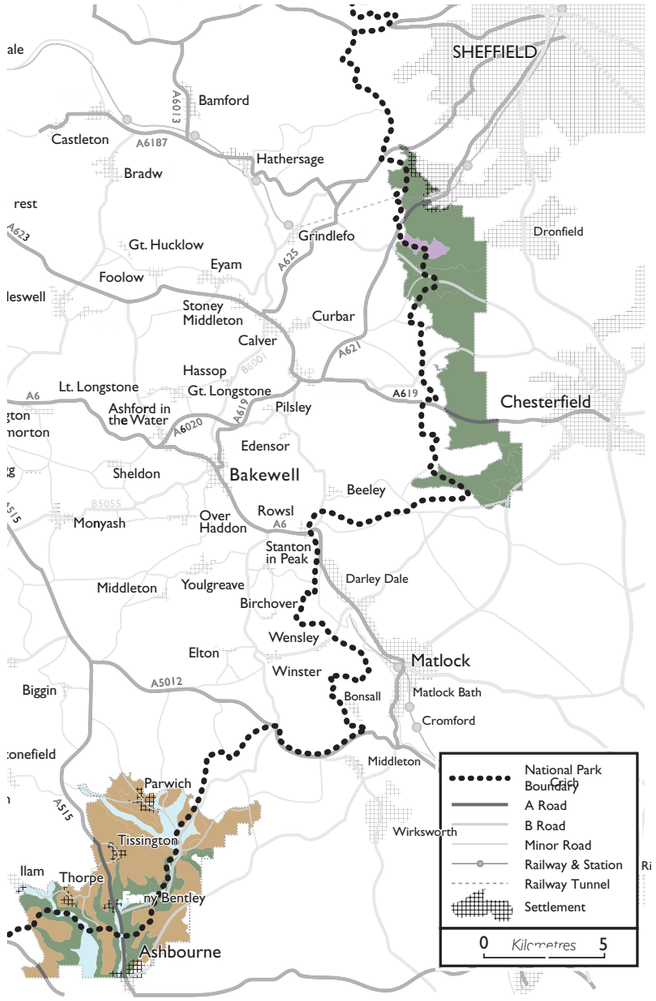
Sense of place

The character of the Derbyshire Peak Fringe is more transitional to that found in other surrounding areas. It includes landscapes that reflect those of the higher Peak District, as well as those that have more in common with the settled lowlands of Derbyshire. The landscape feels more peaceful and less industrialised than the areas further east towards Chesterfield and Sheffield which are more strongly influenced by large scale industrialisation of the 19th and 20th centuries. This level of industrialisation did not occur in the Derbyshire Peak Fringe to the same extent. Away from the urban centres, as the landscape begins to rise up to the moorlands of the Eastern Moors, the landscape is one of enclosed, pastoral agriculture with woodland elements and much less wild in contrast with the moorland uplands of the Eastern Moors.

Around the Parwich and Tissington area, the landscape subtly changes from the limestone plateau. Drystone walls are a feature along with steep slopes which appear wooded because of the hedges and trees that exist there. In the lower parts of this Landscape Character Area there are broad river valleys with floodplains supporting marshland habitats and wet grasslands.

The Derbyshire Peak Fringe can be sub divided into a number of different landscape types, each of which is characterised by a particular aspect of the wider regional character:

- Enclosed gritstone upland
- Slopes & valleys with woodland
- Village farmlands on shale ridges
- Riverside meadows

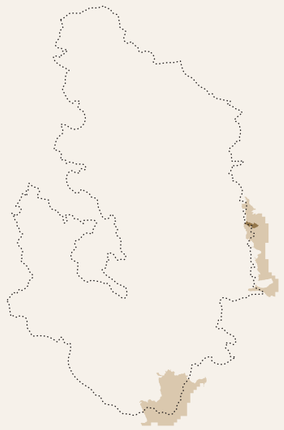


Enclosed gritstone upland LCT

Looking towards Harewood Grange © Peak District National Park Authority

An enclosed landscape on former moorland, associated with a high, gently undulating ridge summit. This is a landscape of isolated stone farmsteads, straight roads and regular fields enclosed by drystone walls.

This landscape occurs on the edge of the Eastern Moors character area in one location at Lydgate near Holmesfield.



Key characteristics

- Rolling uplands with remnant patches of rough land
- Permanent pasture and rough grazing in a regular pattern of medium to large fields enclosed by gritstone walls
- Straight roads with wide grass verges
- Isolated sandstone farmsteads and cottages with stone slate roofs

Geology and landform

This landscape is associated with broad, gently undulating gritstone uplands, in places rising steeply to higher open moorlands.

The Yorkshire Coalfield underlies much of this landscape character type, although sandstone formations also exist here. To the east, near to Owler Bar there is Loxley Edge Rock formation consisting of undifferentiated sandstones. In the west, around Lydgate, Greenmoor rock is the underlying geology, associated with the coalfields; this is a weakly micaceous distinctively green sandstone.

Soils and vegetation

Soil types range from free draining podzols on steeper slopes to wetter soils on gentler summits. All the soils are characterised by their impoverished, acidic origin. There is little semi-natural vegetation; fields are mainly improved grasses, but there is some bracken and gorse on the edge of the area providing local variation. Verges occasionally support relict heath vegetation including bilberry and heather. There are some patches of soft rush on the wetter soils, which often support small populations of breeding birds such as snipe.

Tree cover

The sheep grazing restricts tree growth and regeneration in this landscape. There are some trees associated with settlement, these are mainly scattered oak, ash and sycamore.

Land use

This is a pastoral landscape of improved or semi-improved permanent pasture with sheep and cattle grazing and some rough grazing. There are some reseeded grass leys, however, soils are mostly of poor quality and some fields are dominated by rushes.

Enclosure

Land was enclosed from moorland that was waste and commons prior to enclosure. The western half of this ridge has Parliamentary Enclosure fields dating from the early 19th century creating a grid of medium to large rectangular fields enclosed by gritstone drystone walls. The enclosure at the eastern end of the ridge, around Lydgate, is less regular and possibly pre-dates the Parliamentary Enclosure, being created earlier in the post-medieval period. Small- scale stone extraction occurred here, probably for the building of the enclosure walls and farmsteads.

Settlement, buildings and monuments
Settlement is restricted to the hamlet of Lydgate and wayside farmsteads and cottages which are dated from the time the landscape was enclosed. Buildings are gritstone with stone tiled roofs. There has been some modern infill development.

Transport, access and recreation

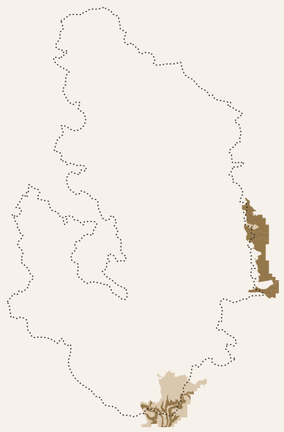
This is a remote landscape with only three roads running through it. The roads are relatively straight with even verges. One road is a main road crossing through the landscape and connecting places such as Sheffield and Chesterfield with the Peak District. Such routes may have medieval origins, having been improved into turnpike roads before being further formalised into the roads of today. There is no open access land in this character type.

Slopes & valleys with woodland LCT

Near Owler Bar © Peak District National Park Authority

An undulating, in places steeply sloping, topography with an interlocking pattern of fields and blocks of woodland both ancient and secondary. There are patches of semi-improved and acid grasslands on steeper slopes with permanent pasture in small fields.

This landscape is found in two locations. In the south it is closely associated with the steep valley sides of the River Dove and its tributary the Bradbourne and Bletch Brooks. In the east the landscape forms a series of interlinked areas along the eastern fringe of the Peak District and creates a natural border between the Peak District and the more urban landscapes to the east.



Key characteristics

- Undulating, in places steeply sloping, topography
- Irregular blocks of ancient and secondary woodland
- Patches of semi-improved and acid grassland and bracken
- Permanent pasture in small fields enclosed by hedgerows
- Narrow winding, often sunken lanes
- Scattered gritstone farms and loose clusters of dwellings
- Remains of historic coal mining, smelting and other industrial sites

Geology, landform and soils

This is a landscape with a prominent sloping topography, dissected by stream valleys. To the south of Bradbourne and Tissington the geology consists of interbedded limestone and shales from the Widmerpool formation giving way to the Bowland Shale group, a combination of shales, siltstone and sandstone. West of Chesterfield and Dronfield the landscape is shaped by the underlying Millstone Grit and Coal Measures giving rise to undulating steep slopes.

The soils are varied, reflecting the mix of rock types. They comprise both slowly permeable, base poor gleyed soils with localised shallow or rocky patches over shale and limestone as well as shallower, free draining soils over gritstone.

Species and habitats

There is widespread pasture in this landscape, including some unimproved grassland. Wetter grasslands support patches of soft rush. Higher up in this landscape character type grassland tends to be acidic and can support patches of bilberry and gorse along with species such as harebell and tormentil.

To the east of Chesterfield, there is significant deciduous woodland cover, made up of some ancient semi-natural woodland interlinked with more recent woodlands. These woodlands often support a good ground flora resource including bluebells and honeysuckle.

Oak woodland predominates, supporting both pedunculate oak and sessile oak with other species including birch, rowan, holly and hazel. Around Fenny Bentley the woodland tends to be associated with the lower slopes. Lower woodlands can have a wet association and support more ash and alder than upland woods. Ground flora also varies to favour more hydrophilic species including meadowsweet and marsh marigold.

Tree cover

This landscape has a strongly wooded character with extensive broadleaved semi-natural woodland, including upland oak wood on the higher slopes. There are patches of wet woodland with alder in flushes. There are some 20th century plantation woodlands, usually coniferous, and there are tree groups around settlements, providing shelter to properties. To the west of Chesterfield many of the woodlands were managed to maximise fuel production for industry and were coppiced, particularly in the 16th to 18th centuries to provide white coal (kiln dried wood) and charcoal. These woodlands included both ancient semi-natural woodland and plantation woodland.

Land use

This is a well wooded pastoral landscape and land use is characterised by permanent pasture for sheep and cattle. As the landscape rises up to higher areas the permanent pastures tend to give way to rough grazing land. North of Holymoorside the remains of old industries, are still evident in places, including mining remains, smelting hearths and mills.

Refractory materials were extracted on the moorland edge near Totley from the 19th century, and there is still a refractory ceramic research facility here today.

A large rifle range was located on the moorland edge above Dore in the early 20th century, and traces of the infrastructure are still visible.

Enclosure

On the slopes between Thorpe and Bradbourne there is a pattern of mostly medium size fields defined by hedgerows. West of Chesterfield and Dronfield the landscape has small to medium sized irregular shaped fields enclosed by mixed species hedgerows, with gritstone walls found on higher slopes. Some fields with irregular boundaries may be associated with assarting: the clearance of wooded land, in order to cultivate land for agriculture. These fields may be historic in that they have marked boundaries for a significant period. Although map evidence is often lacking, the evidence which does exist suggests that some boundaries may be of later medieval or earlier post-medieval date. Gradual modifications to layouts from the 17th to 19th centuries are likely to have taken place.

Settlement, building and monuments

Between Thorpe and Bradbourne the steep slopes have only a few scattered gritstone-built farmsteads and dwellings with stone slate roofs. The farmsteads on the slopes are probably post-medieval in date and part of a predominantly nucleated settlement pattern with the village sited on nearby better land. Limestone from the adjacent White Peak is the common building material around Parwich.

West of Chesterfield and Dronfield settlement varies, consisting of scattered farmsteads mixed with villages and hamlets. Some of the scattered farmsteads are historic monastic granges in origin such as at Harewood. Some of settlements have medieval origins but most buildings date from the 17th century onwards. The traditional building style is gritstone, with stone tile or Welsh slate roofs.

Transport, access and recreation

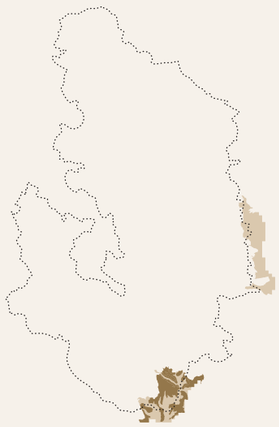
To the south and east there is a network of narrow winding lanes, often sunken, linking the isolated farms and dwellings together. There are some larger roads, some of which were formalised as turnpike roads in the 18th and early 19th centuries. The current railway line between Manchester and Sheffield emerges from the 19th-century tunnel at Totley. A line of airshafts and associated spoil mounds cross this landscape.

Village farmlands on shale ridges LCT

Parwich © Peak District National Park Authority

A small scale, settled pastoral landscape associated with gently rolling shale uplands, where views are typically filtered through scattered mature trees in field boundaries.

This landscape occurs on five discrete uplands in the south of the Derbyshire Peak Fringe, around Brassington and Bradbourne, at Kniveton, near Parwich, at Tissington and Thorpe, and to the west of the Dove at Blore in Staffordshire.



Key characteristics

- Rolling plateau summits with filtered views through scattered mature hedgerow trees
- Pastoral farmland with small to medium sized fields and strip fields, enclosed by hedgerows
- Clustered pattern of villages and scattered farms
- Buildings are a mixture of limestone and gritstone
- Ridge and furrow earthworks

Geology, landform and soils

This is a landscape of a mixed geology. It is predominantly interbedded limestones and shales from the Widmerpool formation and the Bowland Shales formation. The shales are more dominant to the south of Brassington while the limestone is more dominant to the west of Tissington. Around Tissington is an area of volcanic rock from the Tissington Volcanic Member which contains hydrated tuff- like breccia. The combination of this geology gives rise to a landscape with an upland rolling topography. In places there is a covering of glacial till.

Soils are mostly slowly permeable or gleyed clay soils with patches of till (glacial clays). Well drained fine loamy soils, shallow in places, over localised outcrops of limestone, occur west of Tissington and elsewhere.

Species and habitats

This is a largely pastoral landscape that has been improved and farmed for many years. The habitat network is relict with isolated patches of semi-improved grassland and occasional hay meadows.

Hay meadows provide an important habitat for a range of grasses and flower species including oxeye daisy and knapweed. Verges that receive infrequent management can sometimes support flowering species including meadowsweet, red campion and meadow cranesbill.

Tree cover

This is an enclosed landscape where views are often filtered through densely scattered hedgerow trees in field boundaries. Tree species include ash and oak with some alder on wetter areas. There is an avenue of lime trees along the main road to Tissington village possibly associated with the estate influence on the local landscape here.

Land use

Permanent pasture dominates this landscape with a mixture of improved fields and occasional semi-improved fields. Much of the land around Tissington is still managed by the Fitzherbert's Tissington Hall Estate.

Enclosure

There is a well defined pattern of small to medium sized fields bounded mainly by mixed species hedgerows. The fields often overlay extensive surviving ridge and furrow and in addition, around Brassington, Parwich and Thorpe there are fossilised strip fields. Much of the enclosure was probably created in post-medieval times, whereas in the medieval period there were extensive open fields. The contrasting enclosure patterns reflect a complex intermixture: some communities retained traditional rights to open field strips and therefore the patterning was fossilised, and in other communities the links to the open fields were lost and so the patterning was not fossilised. In some cases, as at Tissington, the loss may be related to estate control, which enabled tenanted farmlands to be reorganised more readily.

Settlement, buildings and monuments

Bronze Age barrows occupy a number of hilltop locations to the north of this area, like much of the limestone plateau. At Wigber Low, the barrow lies on the site of an earlier Neolithic excarnation platform, and the site was also a focus for Anglo-Saxon burials.

Today settlement consists of a clustered pattern of villages within a scattering of outlying farmsteads. The villages all have medieval origins, while many of the outlying farmsteads may have been established after the medieval period. One notable exception is Lea Hall near Tissington where there are earthworks of a deserted medieval village. Although buildings may have a medieval origin all of today's buildings, except some churches, date from the 17th century onwards and are built in stone. Buildings are simple and robust in design, being a mixture of either gritstone or limestone, with stone slate or Staffordshire blue tiled roofs.

Tissington Hall was built in 1609 since when it has been modified several times. There is a unity to the buildings in the village here, giving it the feel of a quintessential English village because in its present form design has been controlled by the estate. A Civil War earthwork lies in the centre of the village.

Transport, access and recreation

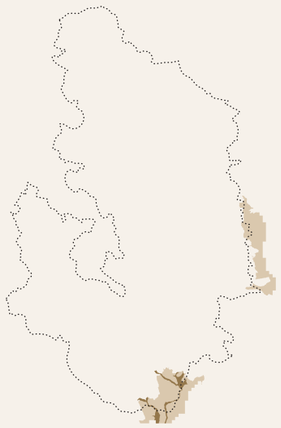
Settlement in this landscape is well connected by a network of minor and major roads, narrow trackways and footpaths. The former Tissington railway line is now an important recreational route for walking and cycling. A small area of this character type, north of the settlement of Thorpe, is open access land.

Riverside meadows LCT

River Manifold nr Ilam © Peak District National Park Authority

This is a pastoral landscape characterised by a meandering river channel in a flat alluvial floodplain. Views are often tightly framed by lines of riverside trees. Patches of wetland vegetation are a distinctive feature associated with the river channel.

Riverside meadows occur on all the valley bottom areas of the Derbyshire Peak Fringe including the lower valley of the River Dove and those at Bradbourne and Bletch Brooks.



Key characteristics

- A flat alluvial river corridor with seasonally waterlogged alluvial soils
- A meandering river channel with shingle beds, marginal vegetation and historic bridges
- Grazing meadows, often with patches or extensive areas of wet grassland
- Dense waterside and scattered hedgerow trees
- Regular pattern of small to medium sized fields divided by hedges

Geology, landform and soils

A key feature of this landscape is the flat alluvial floodplain across which the rivers meander. These rivers have developed on a number of different geological formations, in the north this is mainly the relatively soft Namurian shales from the Bowland Shale formation. The shales give way, below Bradbourne, to limestone interbedded with shales from the Widmerpool formation. Further south from Fenny Bentley, the geology changes again to a sandstone interbedded with conglomerate formation (the Hawksmoor formation).
In places the rivers have cut through the harder gritstone, resulting in a much narrower alluvial floodplain defined by steeper valley sides. This is particularly noticeable in part of the Dove Valley and the lower stretch of the Bradbourne Brook. As a result the width of the floodplain can vary from more than half a kilometre to less than 50 metres at its narrowest point.

The soils are clayey loams, derived from the underlying alluvial deposits which have built up over time as rivers have flooded and deposited material they have carried.

Species and habitats

Patches of wet grassland are a feature throughout much of this landscape. Where the floodplain retains flood water for long periods of time extensive areas of wetland and marshy riverside vegetation can sometimes be found and support specialist species including ragged robin, common marsh bedstraw and occasionally the common spotted orchid.

Tree cover

Tree cover is extensive throughout the landscape. It is made up of densely scattered riverside trees, primarily of alder and willow, with scattered hedgerow trees of oak and ash across the floodplain. In places there are small copses of willow carr.

Land use

Due to heavy soils and seasonal waterlogging the main land use in this character type is permanent pasture, grazed by cattle and sheep. The sites of historic corn mills are located near Bradbourne and at Thorpe, and several characterful bridges cross the river Manifold, the 18th-century Coldwall Bridge being a particularly fine example.

Enclosure

The river is fringed by a regular pattern of small to medium sized fields, normally one and in places two fields deep. Fields are mainly enclosed by straight thorn hedges. Some fields have irregular boundaries, these may be associated with the process of assarting where forested land was cleared in order to cultivate land for agriculture. These fields may be historic in that they have marked boundaries for a significant period. A major exception to this character exists in the broad valley bottom downstream from the village of Parwich. Here, there are many small and narrow fields that fossilise parcels of medieval open field strips, together with the actual ridge and furrow which frequently survives here and in nearby areas of the valley.

Settlement, buildings and monuments

Historically settlement did not develop on floodplains, due to possible flooding risks. However, in parts of the Dove Valley and Bletch Brook areas the underlying geology of shales gives rise to gently sloping land with reduced flood risk enabling the establishment of some isolated farmsteads. In addition to isolated scattered farmsteads, parts of the villages of Fenny Bentley and Mapleton have developed on the edge of the floodplain. Parts of the shrunken medieval village at Ballidon, and the deserted medieval village at Lea Hall fall within this landscape. Buildings are predominantly a limestone rubble construction with gritstone detailing and stone slate roofs. Modern development can be found in isolated locations.

Transport, access and recreation

Most historic routes avoided the floodplain and the wet boggy treed landscape, moving through the landscape on higher and drier land. Roads often follow the edge of the floodplain, especially along the Bradbourne Brook. There are numerous footpaths along the riverside meadows.