

DARK PEAK

CHARACTER AREA 51

An upland landscape of high moors and settled valleys



Location of Dark Peak

Introduction

The Dark Peak extends over a large area of north west Derbyshire although much of it lies within the administrative boundaries of the Peak District National Park. In Derbyshire the Dark Peak extends from Glossop and New Mills in the north and west to the urban fringes of Sheffield in the east and as far south as Matlock. For the purposes of the Derbyshire Landscape Character Assessment the Dark Peak character area also includes the small area of the South West Peak and Manchester Pennine Fringe character areas that lie within Derbyshire.

The expansive moorland of the Peak District is one of the most extensive semi-natural wilderness areas in England. Much of the moorland is traditionally managed for grouse shooting and sheep grazing. Hedgerows and dry stone walls enclose the more sheltered valleys around these upland plateaux to provide pasture for dairy farming with some beef cattle.

The visual and environmental value of this landscape lies in the

Landscape Character Types

- Open Moors
- Moorland Fringe
- Enclosed Moorland
- Settled Valley Pastures
- Riverside Meadows

"Should you tire of the valleys and desire to breathe a larger air, the moors are never far distant - moors gloriously open and grand.... These are the real moors of heather and bracken which flame with brown and yellow and purple in the autumn."

p8 JB Firth 'Highways and Byways in Derbyshire'

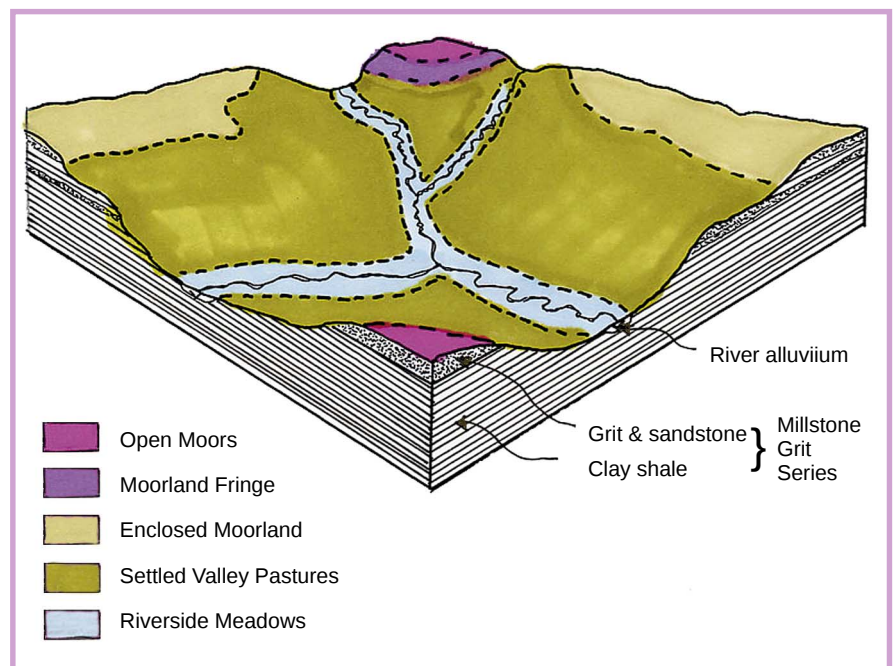
contrast between the wild moorland and the small-scale domesticated farmland within the in-bye land around the margins. These differences form the basis for the sub-division of the Dark Peak into Landscape Character Types.

Buildings constructed from the local 'gritstone' and dry stone walls in the same material reinforce the character and provide a visual link to the underlying geology.

much of its character to the underlying geology of Millstone Grit sandstone. This hard 'gritstone' interspersed with softer shales has given rise to this distinctive landscape of 'high moors' dissected by broad valleys and narrow rocky 'cloughs'. Gritstone outcrops creating rocky tors punctuate these extensive areas of upland plateaux defining the *Open Moors*. Moorland tops provide long uninterrupted views with vertical cliff faces referred to as 'edges' regularly defining the *Moorland Fringe*. Collectively these rocky outcrops add to the wild and exposed nature of this landscape.

Physical Influences

The Dark Peak is a dramatic upland landscape that owes



The plateau tops, rising to 636m at Kinder Scout, are heavily dissected by drainage channels. Where run-off has been sufficient to create rivers like the Goyt and Derwent these have eroded through the gritstone to form broad, often steep sided, upland valleys that have provided the focus for settlement and farming highlighted in *Settled Valley Pastures*. Sometimes scree and exposed rock located within these valleys provide a link to the wild moorland character above the valley sides.

Natural Influences

Semi-natural vegetation is a key characteristic with extensive areas of heather and grass moorland defining the *Open Moors* and making a significant contribution to *Moorland Fringe* and *Enclosed Moorland*.

The lower lying in-bye land associated with *Settled Valley Pastures* retains traditional hay meadows and unimproved pasture, and steep slopes and sheltered cloughs retain areas of semi-natural broadleaf woodland. Where boundaries are not maintained woodlands are gradually being lost as stock graze on young trees and prevent natural regeneration. In recent years grassland management has been intensified on the lower valley slopes and reduced towards the moorland, making the distinction between moorland and enclosed farmland less distinct, thus creating a gradual transition from one to the other.

All of these land-uses provide valuable habitats for wildlife. Heather moorland is a particularly rare national habitat providing a nesting site and food source for a number of rare birds. Broadleaf woodland remains a key characteristic of *Settled Valley Pastures* where along with field boundaries, meadows and pastures it constitutes a mosaic of wildlife habitats.

Human Influences

Evidence of human activity on the Dark Peak dates from the

mesolithic period when hunter gatherers were attracted to even the highest moors, as indicated by finds of stone tools. The extent of settlement in the Bronze Age is dramatically illustrated by the surviving landscape on the East Moors. Here, because of the lack of agricultural improvement, remains of field systems, settlements and ritual monuments survive from the second millennium BC.

Much of the agricultural landscape seen today has developed over the last millennium. The Domesday Book describes the area as sparsely settled and economically backward. Much of the area was included in the Royal Forest of the Peak, and remained so until the 17th century. Although the *Open Moors* remain unsettled and free of man-made features, the lower lying margins of the *Moorland Fringe* and *Enclosed Moorlands* are characterised by scattered farmsteads built in the local gritstone. Villages are confined to the valley bottom and lower slopes of the *Settled Valley Pastures* and often contain industrial terraces that once housed workers from the local textile industry.

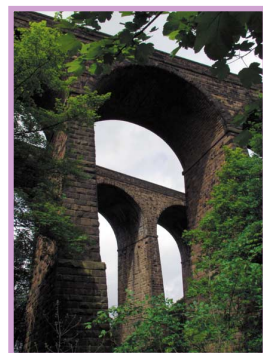


The industrial revolution saw the development of large textile mills in the *Riverside Meadows* and the associated expansion of settlements like New Mills.

Dry stone walls, constructed of the local gritstone are a distinctive feature of the Dark Peak and especially the *Enclosed Moorlands*. Although walls extend into the valley bottoms the lower slopes tend to be enclosed by hedgerows which together with the small fields create a more enclosed character in contrast to

the open expanse of the moors. Where the stone is fissile it has been used for roofing.

Roads and tracks are infrequent throughout. They are generally direct and follow straight lines as they cross the *Open Moors* and *Enclosed Moorland*. Some were former Roman roads or historic packhorse routes. Roads, railway lines and even canals are more a feature of *Settled Valley Farmlands* and *Riverside Meadows*, taking advantage of the easier gradients and serving the local populations and industrial sites.

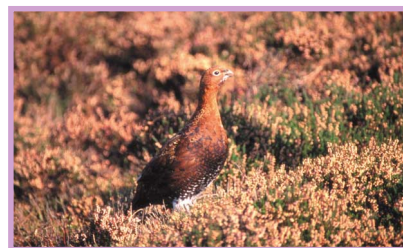


Railway bridges at Chapel-en-le-Frith

Roads extending up the valley sides are few but tend to

occur as winding country lanes sometimes sunken, with steep narrow road verges. Remnant moorland in many road verges is a reminder of the character of the wider landscape. Even where the land either side has been agriculturally improved, these can provide valuable floristic remnants.

The *Open Moors* have been managed for grouse shooting and sheep grazing since the early 19th century. Periodic burning and regular grazing has ensured the retention of the characteristic land cover that is seen today.

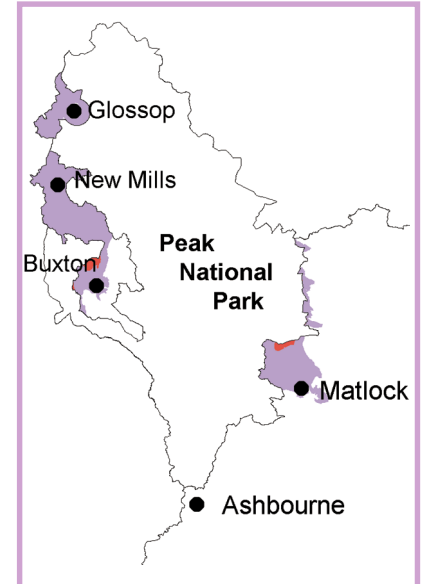


Other Considerations

- Peak District National Park
- Special Landscape Areas
- Peak District BAP

LANDSCAPE TYPE: OPEN MOORS

An upland landscape of rolling highland plateaux of heather moorland with a distinct sense of remoteness and 'wildness'.



Key Characteristics

- Gently to moderately rolling highland plateau
- Raw peat soils and blanket bog over gritstone
- Unenclosed heather moorland extensively grazed by sheep
- Distinct absence of trees
- Many important archaeological (prehistoric) features
- Open and exposed landscape with expansive views

Geology and Landform

These moorland plateaux and hill summits are strongly influenced by the underlying geology of the Millstone Grit Series. The bedrock, of Namurian age, is hard and difficult to erode, creating broad tracts of upstanding highland, rising to over 600 metres at Kinder Scout. The majority of this landscape extends northwards as a broad, expansive plateau, but around the edges where river valleys have eroded through the gritstone there are outliers of moorland plateaux occurring as occasional summits.

The upstanding nature of this landscape creates a strong sense of elevation and space, with panoramic views over surrounding countryside

Soils and Land Use

The soils are raw peat and

blanket bog which infill the hollows of the underlying geology to create a smooth undulating land surface. The peat develops as a consequence of the cold, wet climate that inhibits microbial activity which decomposes organic matter. With time the organic matter accumulates to create deep peat soils usually between 2-4m thick but sometimes as deep as 6m.

This landscape has low agricultural value being used predominantly for sheep grazing or grouse in an extensive farming system.

Ecology

Much of this landscape is covered by heather moorland comprising Calluna, cross-leaved heath and bilberry. In the wettest areas heather is replaced by cotton-grass and Sphagnum moss.

Where the moorland is grazed some acid communities may establish. Over-grazing can be a problem often characterised by the presence of *Nardus stricta* grass. This is an important habitat for ground nesting birds.

Tree Cover

This is a treeless landscape owing to the elevation, the wetness of the underlying soils and the generally harsh climate that makes tree growth difficult. This lack of trees creates an open and exposed landscape with expansive views.

Enclosure

It is essentially an unenclosed landscape although on the more isolated moorland summits there may be very occasional dry stone walls dividing the landscape into very broad enclosures.

Transport

A key feature of these landscapes is their remoteness and inaccessibility. There is the very occasional main route crossing these moorland plateaux but for the most part access can only be gained on foot.

Built Environment

It is an unsettled landscape owing to the hostile climate and low agricultural value of the land. However, there may be evidence of pre-historic man in the presence of standing stones and ancient earthworks.

Summary

These hill summits and moorland plateaux are formed by hard upstanding Millstone Grit to form the most elevated landscapes in the county. Overlain by deep peat and blanket bog this landscape has little agricultural value being used for extensive sheep grazing or grouse rearing.

It is a landscape characterised by extensive semi-natural vegetation in the form of heather moorland. The climate, soils and grazing ensure that no trees are able to grow, so the landscape retains an open aspect with expansive long distance views.

With little agricultural value this is also an unsettled landscape, although there is evidence of early man's existence through the presence of standing stones and prehistoric earthworks.

LANDSCAPE TYPE: OPEN MOORS

Planting and Management Guidelines

Open, rolling treeless landscape of heather moorland.

Excluding the Peak District National Park

Primary woodland character: Open / unwooded

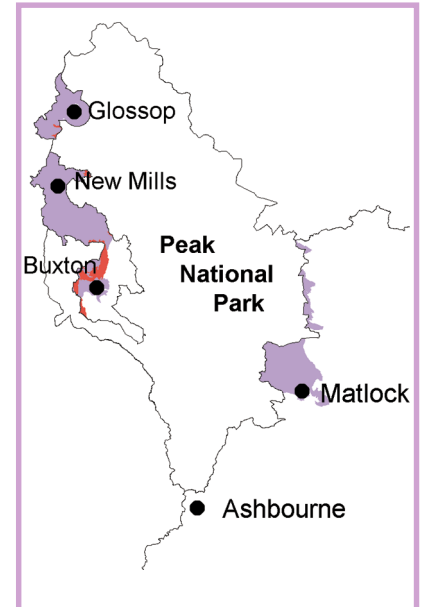
Primary tree character: Treeless

Woodland vision: Open / unwooded

Tree vision: Treeless

LANDSCAPE TYPE: MOORLAND FRINGE

A semi-natural moorland landscape of rough grazing fringing the high moor plateaux with exposed rocky outcrops and open, expansive views.



Key Characteristics

- Moderate to steep upland slopes fringing the open moors
- Shallow peaty soils over gritstone
- Exposed rock and scree slopes associated with gritstone edges
- Unenclosed moorland slopes grazed extensively by sheep
- Extensive semi-natural habitat of heather with rushes in damp hollows
- Distinct absence of trees
- Open, exposed landscape with expansive views

Geology and Landform

A landscape that is strongly influenced by the underlying Millstone Grit geology and defined by the steep upper slopes and edges that fringe the moorland plateaux. There are frequent outcrops of gritstone, most notable when it forms distinct edges with precipitous rock faces and scree slopes.

The resultant landform creates a strong sense of elevation and exposure, with long distance panoramic views over surrounding countryside.

Soils and Land Use

The soils are coarse, loamy and very acid over the upland

gritstone, often having a wet peaty surface horizon. In the less steep hollows shallow peaty soils can develop. Surface water drainage is often impeded by the formation of an ironpan.

Owing to its elevation and poor quality soils this is a very marginal agricultural landscape, used primarily as rough grazing for sheep rearing. Where the slopes are less steep and soils can be improved, more productive grassland will result, provided adequate lime and fertiliser is applied. Much improved pasture has now been abandoned and is reverting back to semi-natural vegetation associated with moorland.

Ecology

A landscape with widespread patches of semi-natural vegetation either as heather moorland, with areas of Calluna, cross-leaved heath and bilberry, or acid grassland where Nardus and Molinia grasses are dominant. In abandoned pastures there are extensive patches of bracken and gorse.

Where the upper slopes form edges to the moorland there are extensive amounts of bare rock and scree, which also act as valuable habitats.

Tree Cover

The wet soils, exposure and uncontrolled grazing associated with these upland slopes seriously restricts tree growth resulting in an essentially treeless landscape. However, there is the occasional small plantation block or scattered trees associated with a minor stream valley. These streamside trees, comprising oak, birch, hawthorn and goat willow are often stubby or stunted. There is however, something of an anomaly at Shire Hill, Glossop

where a steep sided knoll is extensively covered with a broad-leaved woodland of oak and birch.

Enclosure

Visually this landscape appears to be unenclosed although dry stone walls enclose medium to large, regular fields. Many of these walls are neglected and in poor condition, no longer operating as

stock proof boundaries. Where pasture has been abandoned and heather is returning, the walls often blend with the form and colour of this moorland landscape.

Transport

A key feature of these landscapes is their remoteness and inaccessibility. There is the very occasional main route crossing

moorland slopes but for the most part access can only be gained on foot via a network of public footpaths and bridleways.

Built Environment

Large areas of this moorland fringe are unsettled although there is the occasional isolated farmstead constructed of the local gritstone, sometimes retaining a roof covering of stone slates.

Summary

A landscape associated with the upper slopes and edges of broad upland valleys defined by an underlying gritstone geology. The hard bedrock and steep slopes ensure that the soils are thin, freely draining and acidic in character. In some areas the gritstone becomes so resistant to weathering that it forms distinct rocky edges and outcrops.

The altitude allied to the agriculturally poor soils ensure that this a marginal landscape grazed extensively by livestock, predominantly sheep. Enclosure tends to be on a large scale creating a landscape of regular fields bounded by dry stone walls. Farmsteads established at the time of enclosure, are sparsely scattered through the landscape, and are constructed in the local gritstone sometimes retaining a roof covering of stone slates.

Extensive grazing by sheep, the thin soils and hostile climate have resulted in a largely treeless landscape apart from the occasional tree group planted as shelter for the scattered farmsteads. This is an open landscape with panoramic views.

LANDSCAPE TYPE: MOORLAND FRINGE

Planting and Management Guidelines

A steeply sloping, upland landscape of rough grazing fringing the high moors with no trees.

Excluding the Peak District National Park

Primary woodland character: Open / unwooded

Primary tree character: Treeless

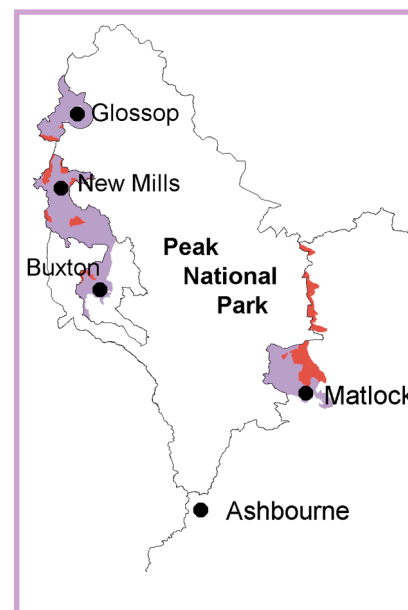
Woodland vision: Open / unwooded

Tree vision: Treeless

- Where opportunities arise the removal of coniferous plantation woodland should be encouraged.

LANDSCAPE TYPE: ENCLOSED MOORLAND

An open, upland-farming landscape on broad rolling hill summits with patches of remnant moorland. Dry stone walls enclose regular fields and straight roads join occasional isolated farmsteads.



Key Characteristics

- Moderate to steeply sloping gritstone hills
- Peaty, podsolized soils over gritstone
- Gritstone outcrops on hill summits and steeper slopes
- Rough grazing and areas of damp pasture with patches of rushes
- Patches of heather, gorse and bilberry especially where fields are reverting back to moorland
- Medium to large regular fields bounded by dry stone walls
- Unwooded landscape other than occasional amenity trees around farmsteads
- Sparsely scattered gritstone farmsteads some with stone slate roofs
- Open landscape with expansive views

Geology and Landform

The underlying Millstone Grit strongly influences this upland landscape creating a series of gritstone hills. The gritstone is hard and difficult to erode, which creates these gently rolling hill summits or small upland plateaux. Exposed rock outcrops are frequent on the steepest slopes forming in places small gritstone edges. Some lower lying summits are overlain with drift from Palaeozoic sandstones and shales adding further to the subdued nature of the rolling plateaux.

Soils and Land Use

The variable nature of the geology and landform gives rise to a diverse range of soil types, all characterised by their acidic, podsollic nature. At higher elevations the soils are shallow and have a peaty surface horizon. On steeper slopes the soils are well-drained and loamy, whilst over drift and on gentler summits, they are slowly permeable, seasonally waterlogged and fine. All soils remain acidic where they are not limed.

The resultant land use is low quality pasture for stock rearing

on wet moorland. Where pasture has been improved or on free draining soils then some dairying occurs although in many areas during the winter there is a high risk of poaching.

Ecology

A landscape with widespread patches of semi-natural vegetation either as heather moorland, with areas of Calluna, cross-leaved heath and bilberry, or acid grassland where Nardus and Molinia grasses are dominant. Where pasture has been improved through liming and fertiliser applications, then habitat value is low or confined to field margins and road verges. There are also patches of gorse and bracken on steeper, free draining slopes.

Where drainage is impeded and soils are slowly permeable then patches of rush pasture with Juncus are locally frequent. At higher elevations and associated with steeper slopes bare rock is common, providing another valuable habitat. This is an important landscape for ground nesting birds.

Tree Cover

The wet soils, exposure and often uncontrolled sheep grazing associated with these upland hills and plateaux seriously restrict tree growth so this is essentially a treeless landscape. However, there is the occasional small plantation block or tree group in association with occasional isolated farmsteads.

Enclosure

Dry stone walls constructed from the local gritstone enclose large regular fields. Many of these walls

are straight, and together with the regular shaped fields, reflect the relatively late enclosure of this landscape from moorland. Place names like Matley Moor and Matlock Moor reflect the former land cover of these areas.

Transport

The roads are straight and direct, having uniform width verges, again reflecting the late enclosure of this landscape. They connect the sparsely scattered farmsteads established at the time of enclosure.



Built Environment

The settlement pattern is dispersed with farmsteads sparsely scattered through the landscape. These are traditionally constructed from the local gritstone with stone slate and Staffordshire blue clay tile roofs.

Summary

An open, upland farming landscape on broad rolling hill summits, formed by upstanding sandstone of the Millstone Grit Series. All the soils are free draining, coarse loams but where they are thinnest or under remnant semi-natural vegetation they become impoverished, acidic and humic.

The present land-use is pastoral although until the award of parliamentary enclosure these areas would have been essentially semi-natural. Heather and bilberry would have been prevalent, although the moorland character is evidenced today with sporadic occurrences of gorse and bracken. Where marginal fields have been abandoned these have quickly reverted back to moor and heath with birch scrub.

Individual sandstone farmsteads are scattered and would have followed the parliamentary enclosure of these areas. This late enclosure is characterised by regular and geometric shaped fields bounded by dry-stone walls. The moorland summits are inherently unwooded and trees are scarce other than those planted around farms for shelter and the occasional patch of colonising birch scrub. This creates an open landscape with expansive views.

The majority of roads are straight with fairly wide uniform width verges and would have been established at the time of parliamentary enclosures. The road verges now function as remnant habitats for many of the semi-natural heath land species.

LANDSCAPE TYPE: ENCLOSED MOORLAND

Planting and Management Guidelines

An open, unwooded landscape on broad, rolling hill summits punctuated by occasional small tree groups around farmsteads.

Excluding the Peak District National Park

Primary woodland character:	Open / unwooded
Primary tree character:	Localised amenity tree groups
Woodland vision:	Open / unwooded
Tree vision:	Localised amenity tree groups

- Conserve and enhance the tree groups that occur within and around rural settlements and isolated farmsteads.

Note

At Matlock Moor there has been large-scale afforestation of the landscape by the Forestry Commission to create extensive commercial woodland. Today local people value this landscape as a recreational resource for walking, cycling and nature conservation. A defining characteristic of Enclosed Moorland is its open and unwooded character. It would be unrealistic and undesirable to remove these large plantation woodlands. However, their visual and biodiversity value could be enhanced by allowing oak, birch and moorland species to develop around the edges as a link and in keeping with their moorland context.

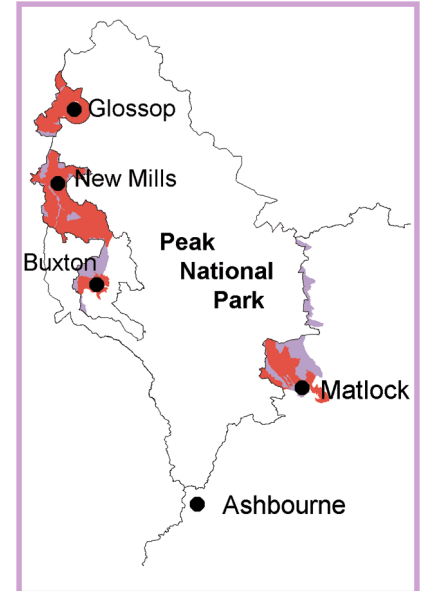
LANDSCAPE TYPE: ENCLOSED MOORLAND

Woodland Species Mix

Amenity Trees - appropriate tree species for planting as amenity trees associated with settlement should include locally occurring large woodland species, eg Sessile Oak (*Quercus petraea*), Pedunculate Oak (*Quercus robur*), and Ash (*Fraxinus excelsior*).

LANDSCAPE TYPE: SETTLED VALLEY PASTURES

A settled, pastoral farming landscape on gently sloping lower valley sides, dissected by stream valleys. Dense watercourse trees, scattered boundary trees and tree groups around settlement contribute to a strongly wooded character.



Key Characteristics

- Moderate to steep lower valley slopes dissected by stream valleys
- Poorly draining soils over Carboniferous shale and sandstone
- Pastoral farming with extensive improved pasture
- Localised bracken in some road verges and rushes associated with damp hollows
- Wooded character associated with tree belts along streams and cloughs, scattered hedgerow trees and tree groups around settlement and farmsteads
- Small irregular fields enclosed by mixed species hedgerows and occasional dry stone walls
- Network of winding lanes with irregular verges, sometimes sunken on steeper slopes
- Settled landscape of small nucleated settlements and scattered stone farmsteads with stone slate roofs
- Stone terraces on lower slopes associated with historic mills
- Enclosed landscape with views filtered by trees

Geology and Landform

A landscape strongly influenced by the underlying geology and defined by the steep to gently sloping lower valley sides of broad upland valleys. Where rivers have eroded through the Millstone Grit they have exposed the underlying shale to create these undulating lower valley slopes. Further variation is created by small stream valleys, which dissect the main valley as they drain the surrounding high moors.

Soils and Land Use

The variable nature of the underlying geology ensures there is similar variation in the soils. On the lower less steep slopes, over shale, the soils are slowly permeable, seasonally waterlogged and loamy, over clay. On the steeper slopes over gritstone there are coarser loams over rock, or finer loams over slowly permeable subsoil.

The traditional land use on these soils is stock rearing and dairying

with much of the land down to permanent pasture. Grass yield potential is good although there is the risk of poaching on the heavier lower lying soils during wet periods. Some of the steeper, upper slopes over gritstone are less intensively grazed and a coarser more acidic grassland predominates.

Ecology

Much of this landscape is intensively farmed as permanent pasture and improved grassland and leys have little floristic interest. However, there are some very occasional species rich hay meadows. Where drainage is impeded or the soils are slowly permeable, patches of wet grassland with *Juncus* are frequent. On the upper slopes over gritstone there may be localised patches of acid grassland dominated by *Nardus* and wavy hair grass. Where the soils are thinner and free draining particularly associated with steep slopes and road verges, heathy plants like bracken, heather and bilberry are locally common.

A network of stream valleys dissecting the main valley sides assist in connecting these patches of habitat in the farmed landscape, which is reinforced by the hedgerow boundaries. These river corridors have dense tree belts and the occasional patch of alder carr. Many of the stream courses have associated ponds and mill ponds that function as important habitats for amphibians. Those that have silted up have now reverted to alder carr.

Several springs and soughs provide wet marshy conditions and lateral water flows, which support isolated patches of species rich marsh.

Tree Cover

Trees are well represented throughout to give the overall effect of a strongly wooded landscape. Dense tree belts, sometimes wide enough to form woodland bands, occur along narrow, tributary stream valleys dissecting the main valley sides. These combine visually with the scattered trees in the hedgerows to filter the views. Small groups of amenity trees are also found associated with settlement and particularly with dispersed farmsteads. Small remnants of ancient woodland persist and these contribute further to the wooded character.



Bluebell woods

At higher elevations trees are less apparent due in part to the exposure and poorer soils, giving way to a more open moorland landscape. Tree species tend to be broad-leaved and predominantly oak and ash. Sycamore is often associated with transport routes, and alder along the watercourses.

Enclosure

A landscape of small, irregular fields enclosed predominantly by hedgerows, although there are occasional and locally frequent walls especially on higher ground. Hedgerows tend to be a mix of species, including holly, hawthorn, hazel and blackthorn. Their species composition suggests that the fields may have been cleared directly from woodland, and that the woodland trees and shrubs were retained to form the hedgerows.

Transport

There is a dense network of winding lanes, with irregular width verges. Sunken lanes are a feature on sloping ground, though they avoid the very steepest slopes. There are also green lanes, some that run just to isolated farmsteads, together with footpaths linking settlements.

Much of this landscape has been utilised as transport corridors with major roads and railways taking advantage of the gentler lower valley slopes. This is particularly notable where the A6 trunk road and railway runs between Whaley Bridge and Disley.

Built Environment

A well settled landscape containing towns, villages, small groups of cottages, and scattered farmsteads. Most traditional buildings are constructed of the local gritstone with Welsh slate and some surviving stone slate roofs.

Much of the built environment has a distinctive architecture relating to the building tradition of the Manchester area and to its industrial heritage, particularly the textile industry.



Many settlements like Chapel-en-le-Frith, Whaley Bridge and New Mills, have spread out along lower valley slopes and owe their origin to the harnessing of water power and their expansion to the industrial age. Terraces of weavers' cottages, some with sloping roof lines, and later Victorian terraces are a characteristic feature of the valley sides.



Summary

This is an upland landscape associated with the lower slopes of broad upland valleys formed by rivers eroding through the Millstone Grit to expose the shale beneath. Tributary valleys that dissect the main valley sides to create an undulating landform provide further interest.

This is a well settled landscape taking advantage of the natural shelter offered by the lower valley sides, the better agricultural soils and the good communications. There are discrete settlements like Whaley Bridge and Chapel-en-le-Frith, small groups of cottages and industrial terraces, and scattered farmsteads. There is a dense network of lanes connecting the villages with the dispersed farmsteads, with main roads and railway lines hugging the lower slopes immediately off the floodplain.

Trees are well represented throughout giving the overall impression of a well-wooded landscape. Many of the tributary valleys feeding the main valleys form wooded cloughs, some of ancient origin, and these woodland belts are supplemented by scattered hedgerow trees, amenity tree groups associated with settlement and secondary woodland along roads and railway lines. Many of the woodlands have an irregular outline reflecting the irregular field patterns and winding lanes.

This is a pastoral landscape and many of the fields are down to permanent improved pasture. However with altitude the grazing becomes less intensive and the pasture tends to be unimproved and therefore of greater importance ecologically.

LANDSCAPE TYPE: SETTLED VALLEY PASTURES

Planting and Management Guidelines

A well wooded pastoral landscape of small organic woodlands, occasionally of ancient origin, with densely scattered hedgerow and watercourse trees.

Excluding the Peak District National Park

Primary woodland character:	Densely scattered small woodlands
Primary tree character:	Densely scattered hedgerow and dense watercourse trees.
Woodland vision:	Widespread small-medium woodlands
Tree vision:	Densely scattered hedgerow and dense watercourse trees.

Typical woodland size range:	0.5 - 15 ha	small-medium
Woodland pattern:	Organic	

- Small-medium scale woodland planting
- Where opportunities arise the removal of coniferous plantation woodland should be encouraged.
- 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.
- Ensure the management and enhancement of hedgerow trees - through selection and natural regeneration, or by planting.
- Encourage the management of scrub and secondary woodland to link with existing habitats and woodland.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.
- Ensure the conservation and management of mature/veteran trees within hedgerows.

LANDSCAPE TYPE: SETTLED VALLEY PASTURES

Woodland Species Mix

Neutral/Base Rich Soils

Primary Tree Species 50%

<i>Betula pendula</i>	Silver Birch
<i>Betula pubescens</i>	Downy Birch
<i>Quercus petraea</i>	Sessile Oak
<i>Quercus robur</i>	Pedunculate Oak

Secondary Tree Species 20%

Major

<i>Fraxinus excelsior</i>	Ash
<i>Ilex aquifolium</i>	Holly

Minor

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

Shrubs 10-30%

Major

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

Minor

<i>Lonicera periclymenum</i>	Honeysuckle
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Open space 0-20%

More Acidic Soils

Primary Tree Species 50%

<i>Betula pendula</i>	Silver Birch
<i>Betula pubescens</i>	Downy Birch
<i>Quercus petraea</i>	Sessile Oak
<i>Quercus robur</i>	Pedunculate Oak

Secondary Tree Species 20%

Major

<i>Ilex aquifolium</i>	Holly
<i>Sorbus aucuparia</i>	Rowan
<i>Populus tremula</i>	Aspen

Shrubs 10-30%

Major

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

Open space 0-20%

Waterlogged Conditions on all soil types

Primary Tree Species 50%

+ <i>Alnus glutinosa</i>	Alder
<i>Betula pubescens</i>	Downy Birch
<i>Salix caprea</i>	Goat Willow
<i>Salix fragilis</i>	Crack Willow

Secondary Tree Species 20%

Major

<i>Betula pendula</i>	Silver Birch
<i>Ilex aquifolium</i>	Holly

Minor

<i>Quercus petraea</i>	Sessile Oak
<i>Quercus robur</i>	Pedunculate Oak
<i>Tilia cordata</i>	Small Leaved Lime

Shrubs 10-30%

Major

<i>Crataegus monogyna</i>	Hawthorn
<i>Salix aurita</i>	Eared Willow
<i>Salix cinerea</i>	Grey Willow

Minor

<i>Prunus spinosa</i>	Blackthorn
<i>Rosa canina</i>	Dog Rose
<i>Viburnum opulus</i>	Guelder Rose

Open space 0-20%

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

Hedgerow Species Mix

Suitable hedgerow plants

Primary 70-75%

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

<i>Corylus avellana</i>	Hazel
<i>Ilex aquifolium</i>	Holly
<i>Prunus spinosa</i>	Blackthorn

Suitable hedgerow trees

Primary 70-75%

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

Secondary 25-30%

<i>Acer campestre</i>	Field Maple
<i>Tilia cordata</i>	Small Leaved Lime
<i>Tilia platyphyllos</i>	Large Leaved Lime

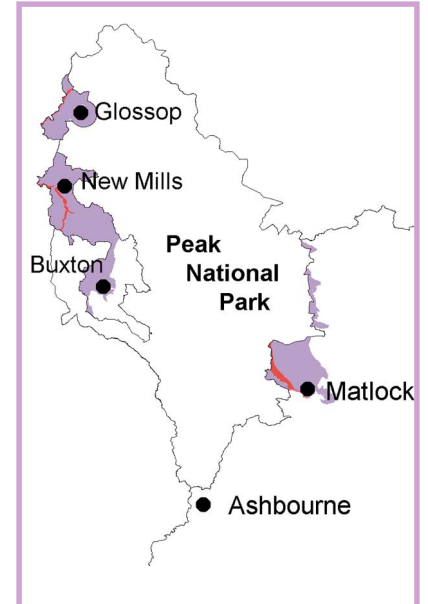
Occasional 0-5%*

<i>Malus sylvestris</i>	Crab Apple
<i>Prunus padus</i>	Bird cherry
<i>Sorbus aucuparia</i>	Rowan
<i>Ulmus glabra</i>	Wych elm

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

LANDSCAPE TYPE: RIVERSIDE MEADOWS

Gentle valley floors contain upland rivers, lined with dense trees. Hedgerows enclose small, sub-regular fields in a pastoral landscape, interrupted by the occasional historic mill.



Key Characteristics

- Gentle valley floors, with narrow flood plains containing meandering rivers
- Seasonally waterlogged soils over alluvium
- Low intensity permanent pasture
- Localized patches of rushes in damp hollows
- Dense trees along watercourses, comprising of alder and willow
- Scattered boundary trees
- Small, sub-regular fields enclosed by hedgerows and dry stone walls
- Lanes along edges or crossing flood plains with gritstone bridges over the rivers
- Industrial heritage associated with gritstone mills powered by water
- Strong sense of enclosure from adjacent slopes

Geology and Landform

The flat base of the valley is upon alluvium, formed when the river floods, slows down and deposits the sediments it carries. At the edge of the valley base, there are gentle slopes. They are underlain by Carboniferous shales and unconsolidated material deposited by weathering and downslope movement of material from the valley sides.

The underlying sediment on the flood plain consists of alluvial mud lying over gravels. The gravel acts as an aquifer, carrying

water from the adjoining land into the river and so is permanently waterlogged (Bridges 1966). The flood plain is generally flat in profile, with a gentle gradient downstream. There are hollows in the flood plain reflecting the past course of the river. Along the river margins, there are often noticeable banks called levees. These form due to the deposition of sediment as flood waters wane and return to the river channel.

Soils and Land Use

The soils are clayey loams, which are seasonally waterlogged.

Some areas are permanently waterlogged and some wet hollows retain flood water long after the majority of the floods have subsided. The traditional land use is permanent grassland due to the heavy waterlogged nature of the soils and harsh climate.

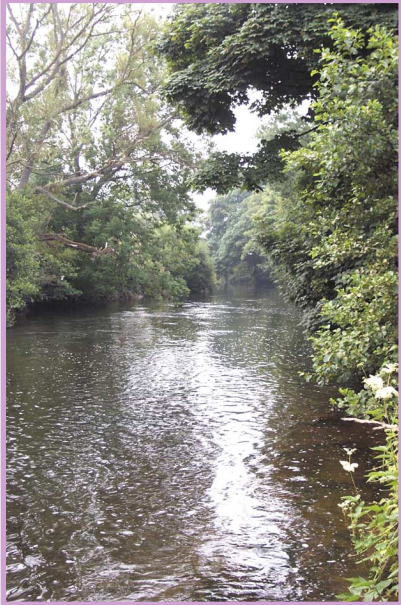
Ecology

The wet meadows, found in hollows in the flood plain, remain partly flooded for much of the year. They support a marshy vegetation with rushes and are important remnants of a diminishing habitat type. Riparian trees add to the ecological value particularly where there are patches of willow carr.

Further habitat diversity is provided by bands of scrub and secondary woodland that are colonising abandoned pasture.

Tree Cover

There are lines of scattered alder and willow along the banks of the river including the occasional patch of willow carr.



Trees line river banks

There are also occasional mature trees along field boundaries. These are principally oak and ash.

The tree cover is greatly intensified by the secondary

woodland and scrub associated with abandoned and neglected pasture. Tree cover, together with the valley landform, creates a small scale enclosed landscape.

Enclosure

The valleys are fringed on either side of the main rivers by a band of one or two fields, with fairly straight boundaries. The fields are enclosed by thorn hedgerows and dry stone walls.

Transport

The gentle valley bottoms contrast with the steep slopes of adjacent landscape types and form the obvious route for transport corridors. Lanes are not numerous but, where they occur they tend to run along the edge of the flood plain, raised up on embankments to reduce the risk of flooding. Occasionally roads cross the rivers over gritstone bridges.

Built Environment

Historically there would have been little built development on the flood plain. Farmsteads would have occupied the higher ground to the edge of the valley, where the risk of flooding was less. However, scattered throughout this landscape are water-powered gritstone mills and a few later steam-powered mills, often constructed of red brick with prominent chimneys.



Corn mill at Rowsley

Summary

Fast flowing meandering rivers dissect Carboniferous sandstones and shales to form gentle valley floors with narrow flood plains. The soils are heavy clay loams prone to prolonged seasonal waterlogging.

These soils have traditionally supported meadowlands grazed by cattle. Fields tend to be medium sized enclosed by a mix of dry-stone walls and thorn hedgerows. Boundaries tend to be straight although the edge of the flood plain is often sinuous.

Within the flood plain there are occasional mature hedgerow trees, predominantly oak and ash, with scattered trees, usually alder, along the river banks. The river corridor has a strong sense of enclosure created by the steep valley sides and extensive secondary woodland.

Due to the risk of flooding this landscape would have been unsettled, with farmsteads being located on the valley sides. The valleys were transformed during the industrial revolution when industrialists built large mills to harness the power of the water. Some mills with associated weirs and pools remain today, converted to new uses.

Lanes are scarce and tend to cut across the flood plain but there are major roads and railway lines located at the edges, often on embankments.

LANDSCAPE TYPE: RIVERSIDE MEADOWS

Planting and Management Guidelines

An open floodplain with dense watercourse trees.

Excluding the Peak District National Park

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 - 5 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.

LANDSCAPE TYPE: RIVERSIDE MEADOWS

Woodland Species Mix

Waterlogged Conditions
on all soil types

Primary Tree Species 50%

- | | |
|--------------------------|--------------|
| + <i>Alnus glutinosa</i> | Alder |
| <i>Betula pubescens</i> | Downy Birch |
| + <i>Salix caprea</i> | Goat Willow |
| + <i>Salix fragilis</i> | Crack Willow |

Secondary Tree Species 20%

Major

- | | |
|------------------------|--------------|
| <i>Betula pendula</i> | Silver Birch |
| <i>Ilex aquifolium</i> | Holly |

Minor

- | | |
|------------------------|-------------------|
| <i>Quercus petraea</i> | Sessile Oak |
| <i>Quercus robur</i> | Pedunculate Oak |
| <i>Tilia cordata</i> | Small Leaved Lime |

Shrubs 10-30%

Major

- | | |
|---------------------------|--------------|
| <i>Crataegus monogyna</i> | Hawthorn |
| <i>Salix aurita</i> | Eared Willow |
| <i>Salix cinerea</i> | Grey willow |

Minor

- | | |
|------------------------|--------------|
| <i>Prunus spinosa</i> | Blackthorn |
| <i>Rosa canina</i> | Dog Rose |
| <i>Viburnum opulus</i> | Guelder Rose |

Open space 0-20%

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

Hedgerow Species Mix

Suitable hedgerow plants

Primary 85-100%

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

Occasional 0-15%

- | | |
|-------------------------|-------|
| <i>Corylus avellana</i> | Hazel |
|-------------------------|-------|

Suitable hedgerow trees

Primary 70-75%

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

Secondary 25-30%

- | | |
|-----------------------|-------------|
| <i>Acer campestre</i> | Field Maple |
|-----------------------|-------------|