

The Dark Peak

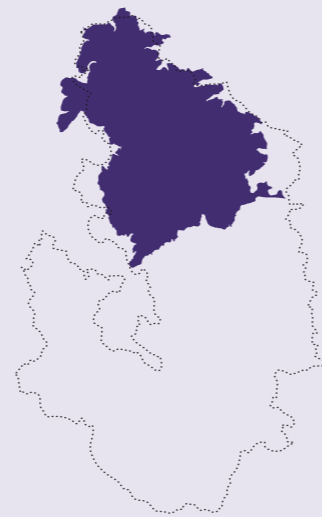


Dark Peak open moorland © Peak District National Park Authority

Introduction

The Dark Peak is a sparsely settled area of gritstone uplands lying at the southern end of the Pennine Hills. The area comprises an extensive upland plateau with steep gritstone slopes, sometimes with rocky edges, that drop away to lower lying slopes, wooded cloughs and deep valleys, some of which have been flooded to create large reservoirs.

It contrasts sharply with the adjoining limestone uplands of the White Peak and is named on account of the dark hues created in the landscape by the peat moors and exposed gritstone. While this landscape character area contrasts with the White Peak, the transition to other landscape character areas such as the Dark Peak Eastern and Western Fringe landscapes is much more gradual; these are landscapes of similar character but tend to be lower lying, more settled and more intensively managed than the Dark Peak with enclosed farmland rather than open moorland predominating. The Eastern Moors to the south-east of the Dark Peak are similar to it in character but lower lying with less deep peat creating a landscape that has been more obviously modified by people than the Dark Peak generally has. In the north, the moorland plateau of the Dark Peak continues into the Southern Pennines.



Physical influences

The Dark Peak is an extensive area of high moorland and adjacent in-by-land that owes much of its character to the underlying shales, siltstones and sandstones, known as Millstone Grit. The hard gritstones are interspersed with beds of softer shales and together these have given rise to a distinctive topography of high moors dissected by narrow rocky cloughs and broader valleys. Gritstone outcrops, creating rocky tors, often punctuate these extensive areas of upland plateau which define the open moors. Vertical cliff faces occasionally define the 'edges' of the moorland summits, where the land falls away into the moorland fringe.

The plateau tops, rising to 636 metres at Kinder Scout, are mostly covered in blanket peat, usually between 2 and 4 metres in depth, but in places deeper. The blanket peat landscapes have a smooth, gently sloping ground surface which, over extensive areas, has been subject to gully erosion and become dissected by a dense network of drainage channels, locally known as 'groughs'. Drainage from the moorland summits often passes into deep, steep sided cloughs within the surrounding slopes, which in turn eventually drain into larger rivers like the Goyt, Etherow and Derwent.

The rivers have eroded through the gritstone to form broad, often steep sided, upland valleys, which historically have provided the focus for settlement and farming. Sometimes boulder fields and exposed rock located within these valleys provide a link to the wild moorland character above the valley sides.

Ecological influences

For the most part the soils of the Dark Peak are impoverished and a substantial area in the core of the region is covered in blanket peat. On the open moors and moorland slopes, there are extensive areas of blanket bog, heather and grass moorland.

Extensive tracts of blanket bog on deep peat cover large areas of the highest plateau of the Dark Peak. These blanket bogs support breeding birds such as the golden plover and dunlin. Cottongrasses dominate, often with areas of heather or with bilberry and crowberry.

On the lower moorland slopes heather dominates, with varying amounts of bilberry, cowberry and crowberry. These upland heaths support birds such as red grouse, meadow pipit, curlew, merlin and short-eared owl. Associated areas of bracken are important in places for breeding twite and whinchat. Acid flushes have developed locally, with carpets of sphagnum moss, sedges and rushes, with local plants such as cranberry, bog asphodel and sundew. Where gritstone crags, tors and boulder slopes occur the exposed rock supports a lichen flora impoverished by air pollution, though relict species of importance can occur locally. Peregrine, raven and ring ouzel breed on some crags. Mountain hares, introduced in the late 19th century, are commonly seen throughout the moors. In the other former moorland landscapes such as Rushup Edge, where much of the land has now been enclosed and heavily grazed, the heathland has been replaced by rough grazing land dominated by grasses such as mat grass or wavy hair-grass, often in association with areas of bracken. Relic moorland species such as bilberry may be present in the sward.

Fast flowing streams have created deeply incised cloughs and valleys whose sides are clothed with heathland often with frequent bilberry acid grassland and bracken. The numerous flushes and springs arising at the junctions of gritstone and shale on clough sides support particularly botanically rich communities whose species composition varies according to water chemistry. The banks of clough streams and upland rivers support small numbers of dipper, grey wagtail and common sandpiper, while wet streamside shale crags are often rich in mosses, liverworts, ferns and insect life.

Some cloughs and moorland slopes support areas of upland sessile oak wood. Associated species include birch with holly or hazel in the under storey. On the more base rich soils these woodlands can support a variety of ground flora, including dog's mercury and yellow archangel on shale soils and wavy hair-grass and bilberry on the more base poor soils. Characteristic birds of these woodlands include pied flycatcher, redstart and wood warbler.

In lower areas, as the cloughs widen, the lower valley slopes are characterised by enclosed land on slowly permeable, seasonally waterlogged soils that support some unimproved pastures and hay meadows. The former typically comprise acid grassland dominated by fescues and bents, with herbs such as tormentil and heath bedstraw and patches of gorse and bracken, while the hay meadows provide a range of flora such as yellow rattle, knapweed, great burnet, bird's foot trefoil and common cat's ear. On less well drained land, where the ground is wetter, the pastures often support soft rush and can provide a breeding ground for wading birds, notably lapwing, curlew and snipe.

Large valley reservoirs support small numbers of wintering ducks, and common sandpipers breed along the shorelines in summer.

The drawdown zones of these reservoirs can be of importance for their flora with species such as mudwort and shoreweed present. Conifer plantations are often, though not exclusively, associated with reservoir valley sides, and may have patches of semi-natural woodland or broadleaf plantation within them. The flora is generally limited but can be of importance for fungi. Several birds of note are associated with the plantations, such as goshawk and crossbill.

Human influences

The Dark Peak is now relatively unsettled, due to the harsh climate. However the landscape has been managed for the needs of humans since prehistoric times. The northern Dark Peak has extensive evidence of Mesolithic hunter-gatherers, with stone tools uncovered when peat is disturbed or eroded. The development of peat and the disappearance of tree cover on the high moors began in the early Mesolithic period due to climate and human activity. The Dark Peak is a higher landscape and was too exposed and boggy for the kind of later prehistoric settlement found on the Eastern Moors. The Later Prehistoric hillfort on Mam Tor lies on a prominent hill at the edge of the Dark Peak; the occupants probably grazed the high uplands although their main focus is thought to be the adjacent limestone plateau and the Hope and Edale valleys.

The deep valleys which cut into the Dark Peak have been used for agriculture from later prehistory to the present. The settlement pattern is very dispersed, with small hamlets and many farmsteads of medieval origin. In the last few hundred years the land use within enclosed fields around each farmstead has been mainly pastoral. The limited arable farming practices on the more favourable soils has declined significantly in the 20th

century, but there is an exceptionally high survival of traditional farmsteads. The uplands have long been used for rough sheep grazing which, where prolonged, has reduced the dwarf shrub heath cover, replacing it with cottongrass bog or grass. Where management allows, the semi-natural heather moorland give rise to the summer purple moorland tops typical of the Dark Peak.

Before the widespread availability of coal, the uplands provided fuel in the form of peat. Once, peat cutting on the high wastes and commons was a communal right, but when the land was privately owned, landowners gave the right to cut peat, usually from a designated location, to tenants. Domestic scale cutting often took place above farm properties and was of a much smaller scale. This activity was carried out on the moorland tops near to settlements in the lower valleys and the results are still visible in the landscape such as above both Edale and the Upper Derwent Valleys. Tracks and sled runs to peat cutting sites are also still visible in the landscape. Heather and bracken were also cut for bedding, roofing and fodder.

Tracks and braided hollow-ways are also found running to pastures, water sources and quarries. Some are relict trade and commerce routes over the moors, running across the Peak District. Transport routes have always crossed the Dark Peak, although these are relatively rare when compared with those that cross the gritstone uplands further south. Some are famed, such as Jacob's Ladder, a packhorse route from Edale up Kinder Scout.

Some routes have been formalised into roads while others have become relict features in the landscape. Later routes became more innovative, such as the Woodhead Railway tunnels which connected Manchester and Sheffield by rail; these tunnels now carry electricity

transmission lines and the Trans Pennine Trail follows the route of the redundant railway.

The valleys of the Dark Peak have been used for water catchment with the construction of several reservoirs that were built to supply water to the surrounding urban settlements. The Longdendale Reservoir, built in 1840, supplies water to the Manchester conurbation while the Howden and Derwent Reservoirs, built in the early 1900s, and the later Ladybower Reservoir, supply the East Midlands and Sheffield. Along with the large valley reservoirs are a number of smaller reservoirs within the moorland landscape, such as Winscar and Chew reservoirs. The reservoirs support water supply and recreation.

The Dark Peak has a very important role in recreational and access history, which began by providing royal hunting grounds and much later becoming an important location in the fight for socially equitable access rights. During medieval times much of the Dark Peak, and the Dark Peak Western Fringe lowlands to the west, made up part of the Royal Hunting Forest of the Peak, with severe penalties for poaching and access limited to a privileged few. By contrast, on 24th April 1932 the right of public access was fought for in the Dark Peak with the famous Kinder Trespass which was instrumental not only in gaining public access to areas of previously private land but also added to the debate that led to the creation of national parks.

The Dark Peak also has a well-known role in the development of rock climbing as an accessible sport to all social classes. Prior to the 1950s rock climbing was a socially elite pastime with expensive gear and difficulties accessing rock faces. Climbers such as Joe Brown and other working class men from Manchester and Sheffield developed a new, less formal approach to climbing

with a focus on the Dark Peak and the Eastern Moors. Eventually these climbers evolved the sport, developing gear and climbing styles that are still used today.

The Dark Peak offers opportunities for solitude, tranquillity, and appreciation of wild beauty that the surrounding, more settled landscapes cannot. This is illustrated by the types of recreational access enjoyed and in particular the

freedom to roam on the open moorlands. These characteristics and the historic context and sense of place from the moorland access campaigns and the former trade routes are highly valued characteristics by some visitors, providing an important cultural and recreational resource and experience.

The area also attracts those following the long-distance national trails and those

who enjoy the more adventurous sports such as mountain biking, fell-running and climbing. Easier to access areas, such as the paths around reservoirs, are also popular for a diverse range of visitors although access to the water is generally restricted to formal use by clubs. There is also some recreational motorised vehicle use on certain routes.



Landform and farming shape the distinctive features of Rushup Edge © Peak District National Park Authority



Ashop Moor in cloud © Peak District National Park Authority

Sense of place

The Dark Peak is famed for its open tracts of moorland tops that stretch great distances and create a sense of remoteness and tranquillity. Even though large areas of the moorland landscapes are not 'natural' landscapes and are quite intensively managed, they possess a sense of naturalness and wildness; the plaintive calls of the golden plover on the high moors and the haunting call of the curlew enhance this feeling.

The moorland tops appear dark due to the weathered gritstone bedrock, exposed and blackened in places, which tones with the dark oranges and browns of heather and grasses. During the summer months extensive tracts of blanket bog on the high moors are dominated by the waving white heads of cottongrasses, which

give rise to distinctive place names such as 'Featherbed Moss', while in the late summer the lower moorlands become bright and vibrant when the purple heather flowers over extensive tracts of land.

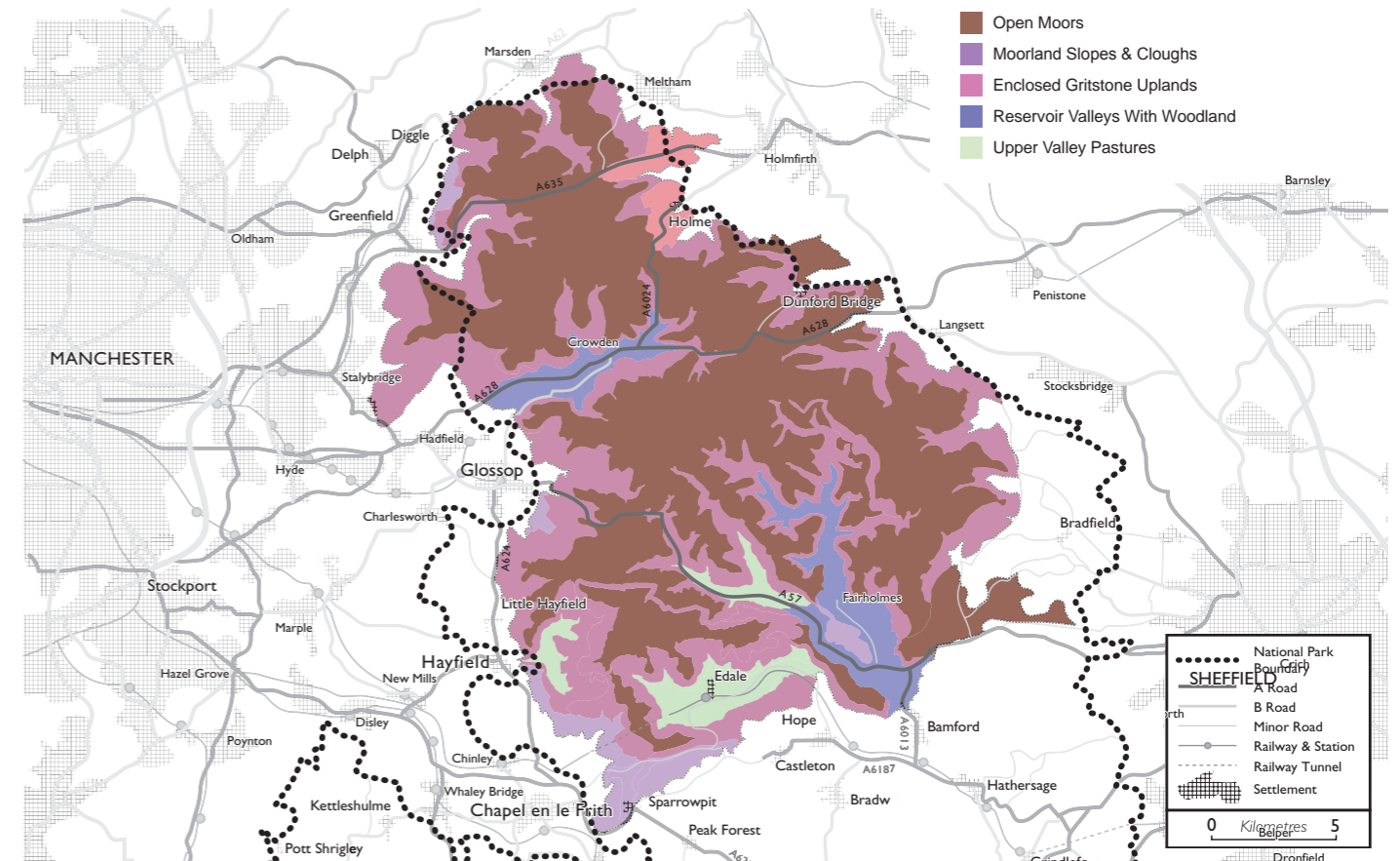
The moorlands are dissected in places by steep cloughs and slopes, with gritstone outcrops, tors and scree slopes. These slopes and cloughs often support patches of wilder, semi-natural habitats including woodland and scrub. Further down the valleys and slopes the landscape changes, generally becoming more enclosed and pastoral. The peacefulness and tranquillity remains but the landscape becomes more intimate and settled with gritstone drystone wall enclosures and isolated gritstone farmsteads.

The enclosed fields and increased tree cover make the landscape more varied in both texture and colour. Moorland

vegetation such as bilberry remains along field boundaries, verges and small patches of relict habitat.

Some areas historically supported limited industry, including quarrying, mining and textile production. Now there is no major industry and the valleys tend to be a mosaic of woodland and pastoral fields, with some relics of their industrial past. Some valleys have altered significantly with the building of reservoirs, creating large human-made features but generally still resulting in peaceful, tranquil landscapes. In some valleys the reservoirs are associated with extensive woodland cover, with many coniferous plantations, which provide further recreation opportunities.

Five distinct landscape character types have been identified in the Dark Peak. These are:



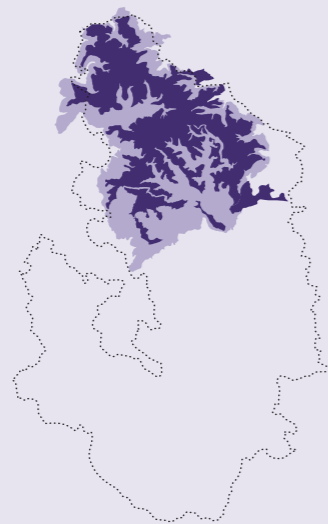
Open moors LCT



Wessenden Head Moor © Peak District National Park Authority

An open undulating high gritstone plateau with extensive blanket peat covered by cottongrass bog and heather moorland. This is a wild, unsettled landscape with wide views to distant surrounding hills.

This is a visually prominent landscape which covers more than half the area of the Dark Peak and is associated with the blanket peat on the higher summits at the core of the region.



Key characteristics

- An unsettled and seemingly-wild landscape with vast panoramas over surrounding hills and lower ground. The lack of obvious human-made features contributes to the sense of remoteness and tranquillity.
- An undulating high gritstone plateau with localised rock outcrops and boulders, in the form of rocky edges and tors and incised cloughs
- Thick deposits of peat with unenclosed heather and grass moorland and extensive areas of blanket bog and rough grazing land
- Significant clusters of prehistoric lithic scatters on the northern moors

Geology, landform and soils

The open moorland is a large-scale, exposed landscape where the underlying Millstone Grit strongly influences the nature of the landform, creating a high, undulating topography allowing wide views to distant skylines. The gritstone bedrock is hard and slowly eroded, giving rise to a moderately undulating landform of highland summits and ridge lines, with occasional rocky outcrops and tors, rising to 636m at Kinder Scout.

For the most part, the thick covering of blanket peat gives this landscape a smooth, gently sloping ground surface extensively dissected by a network of drainage channels or groughs, which feed into small rocky clough heads.

Habitats and species

Most of the open moorland is underlain by thick deposits of blanket peat. These have developed during the last 10,000 years, with the maximum growth during a warmer period 8,000 to 6,500 years

ago, and are, for the most part, between 2 and 4 metres thick. Much of this landscape is covered by blanket bog dominated by cottongrass or a mixture of cottongrass and dwarf shrubs (heather, bilberry and crowberry), which supports northern species such as cloudberry locally. Shallow bog pools occur sporadically, but gulying of the peat is extensive across much of the blanket bog, resulting in drainage and erosion.

On shallower peat, or where the land is managed more intensively for grouse shooting, dwarf shrub heath dominated by heather tends to replace the blanket bog, with variable quantities of crowberry and bilberry.

Where the peat is wetter, other species such as deergrass and bog asphodel can become more prevalent. Sphagnum mosses, essential to the formation of peat are now not as widespread as they used to be.

Tree cover

The high moors are generally an open, relatively treeless landscape with expansive views. Remnant patches of woodland and scrub which have not been grazed or burned remain, often associated with cloughs. This landscape was more wooded in the past, as indicated by many ancient tree stumps buried under the peat. The evidence suggests that these trees were cleared, or died out due to climatic changes, during the Later Mesolithic to Bronze Age. Subsequent management practices have kept tree cover low.

Land use

This landscape generally is used predominantly for sheep grazing, or for managed driven-grouse shoots. The associated infrastructure including grouse butts and occasional shooting lodges is visible in places. New developments (e.g. tracks for vehicles) associated with grouse moor management can be intrusive and conflict with character.

There are some small reservoirs in this landscape character type, which tend to be associated with the edges of the open moors.

Enclosure

This is a largely unenclosed landscape where the lack of enclosure creates dramatic and expansive open views. On the fringes of the type there is occasional enclosure associated with the adjacent landscapes with gritstone drystone walls surrounding regular medium to large fields.

Settlement, buildings and monuments

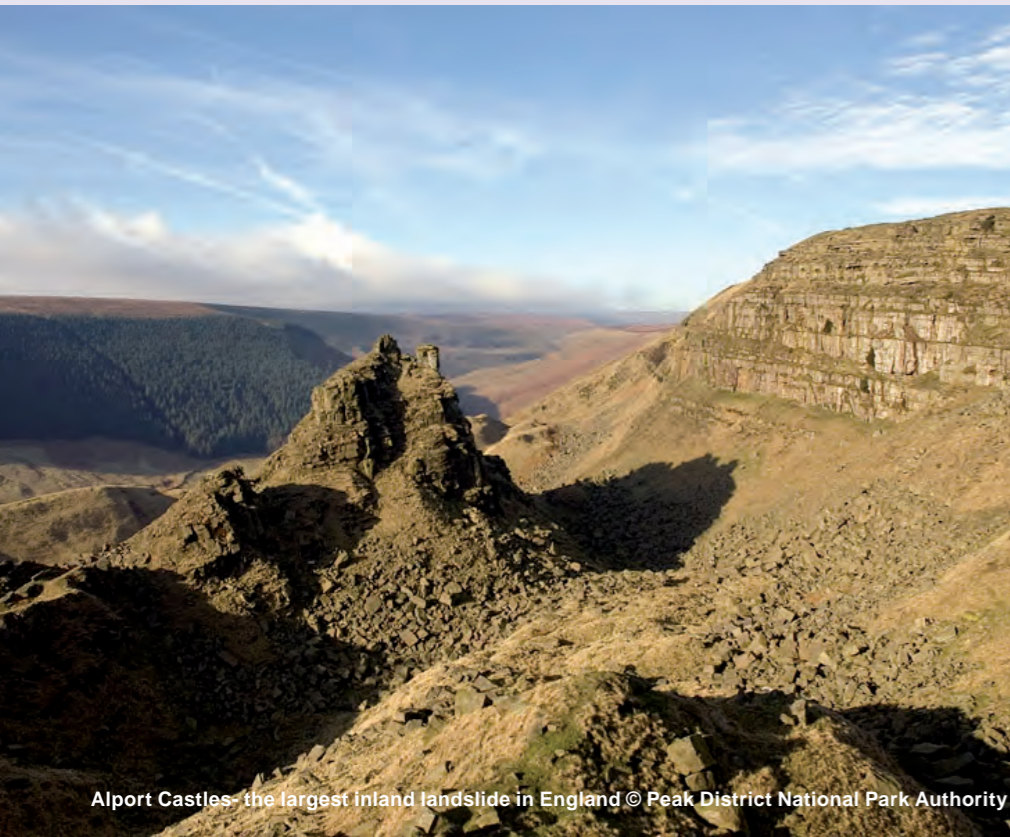
This is an unsettled landscape with built features existing only locally. There are occasional grouse butts and shooting cabins, and isolated farm buildings built from local gritstone. There are significant clusters of Mesolithic and Neolithic flint scatters on the northern moors, such as Rocher Moss and Meltham Moor. Lithics on early ground surfaces are sometimes exposed at the very edges of the open moors, where the peat is more prone to erosion. There are occasional other features such as the War Memorials on top of Pots and Pans Hill in Saddleworth,

Lady Cross, a medieval monastic boundary marker close to Round Hill, and prehistoric barrows as at Kinder Low. Several military aircraft crash sites are located on the open moors.

Transport, access and recreation

Transport is a limited feature of this landscape character type, however, some of the historic routes continue as important routes through the landscape. A small number of significant trans-Pennine roads cross the open moorland. Some were built as turnpike roads, formalised from the pre-existing trackways over the moors. Old tracks are often still evident in the landscape as hollow-ways sometimes braided where routes were modified to avoid wet areas caused by erosion through frequent use. There are also numerous local tracks and hollow-ways that link old upland grazing sites, water sources and peat cutting areas to settlements in the lower areas. Today, most of the open moorlands are open access land and are only accessible on foot. Recreation is an important land use in the Dark Peak with the majority of the character type designated as open access land.

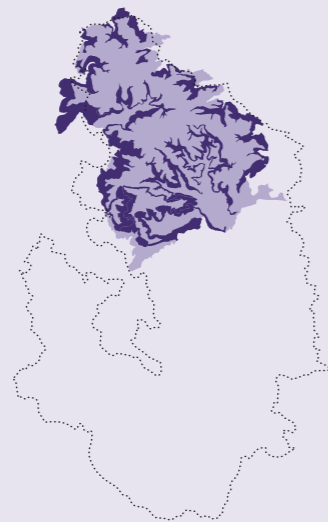
Moorland slopes & cloughs LCT



Alport Castles – the largest inland landslide in England © Peak District National Park Authority

Steep slopes and cloughs rising to open moorland on the high plateau above, with widespread rough grassland and heather moor, grazed by sheep. This is a wild unsettled landscape with exposed views over lower ground.

This is a landscape with a scattered distribution, often occurring as a series of narrow strips around the edge of the open moorland core. A number of larger units occur along the north-western edge of the Peak District.



Key characteristics

- Steep slopes and cloughs rising to the moorland plateau above with prominent gritstone outcrops, boulders and scree slopes. Numerous springs and flushes arising on slopes and clough sides
- Rough acid grassland, bracken and heather moorland with relict areas of oak-birch woodland and scrub in cloughs
- Exposed views over lower ground, sometimes limited by clough sides
- Relict farming landscapes

Geology, landform and soils

This is a sloping landscape that is strongly influenced by the underlying Millstone Grit geology and defined by the steep upper slopes and edges that fringe the open moorland plateau. The resulting landform creates a strong sense of elevation with distant and panoramic views over surrounding countryside and to the moorland tops. There are frequent outcrops of gritstone, most notably at the break of slope where the slopes meet the open moorland plateau above. Cloughs are a common feature in this landscape, formed by the incision and deep erosion of fast flowing streams.

Landslips have long occurred in this landscape type: at the end of the late Devensian glacial period, as ice was retreating, glacial modification and over-steepened slopes resulted in landslips. Other causes, more common recently, are water over-saturation that reduces the rock's shear strength and the location of high mass strength rocks, such as the gritstone, overlying weaker rock layers such as shales. Landslips are a local feature here and vary in scale; the landslide at Alport Castles is over 1km in extent: the largest inland slip in England. Mam Tor is known as the Shivering Mountain because

of its repeated landslips. Localised peat erosion can occur due to management practices.

Soils are coarse, loamy and very acid over the gritstone bedrock. Surface water drainage is often impeded by the formation of a thin ironpan and in less steeply sloping areas the soils often have a wet peaty surface horizon.

Habitats and species

This is a landscape with widespread patches of semi-natural vegetation, usually comprising a mixture of heather and bilberry moorland, with areas of acid grassland. Patches of bracken are regularly extensive.

Where the upper slopes form edges to the moorland and on the sides of steep cloughs, there are frequent extensive amounts of bare rock and scree, which can provide for a range of valuable habitats. Some cloughs support fern banks including beech fern and oak fern, while on land that is inaccessible to grazing, such as ledges, tall vegetation species such as goldenrod flourish. The interleaving of permeable gritstone with less permeable shales gives rise to numerous springs and flushes on slopes and clough sides at the junction of the rock types. These often support a particularly diverse flora and insect fauna.

Tree cover

Historic management practices have reduced tree cover in this landscape to low levels. However, remnant woodlands, scattered trees and patches of scrub often occur within cloughs, while occasional small plantation woodlands can sometimes be found on moorland slopes. Clough woodlands can be wet or dry.

Wetter woods tend to be associated with alder, or birch and willow, whereas the drier woodlands are dominated by sessile oak and pedunculate oak, with birch and holly, or hazel in the under storey. Localised 20th century conifer plantations occur in this landscape character type.

Land use

Owing to its elevation and poor quality soils, this is a very marginal agricultural landscape, used primarily as rough grazing for sheep. The slopes support a range of recreation including hang gliding, paragliding and walking. Rock climbing is popular on the craggy outcrops such as at Shining Clough on Bleaklow, Kinder Downfall, Laddow Rocks and Wimberry Stones Brow and also in the many relict gritstone quarries. There are some coniferous plantations, for example at Bradfield and beside the Snake Pass.

Enclosure

Large areas of this landscape character type remain unenclosed. Occasional drystone walls define ownership boundaries. There are areas of enclosure, particularly around Saddleworth, where much land was already enclosed by 1770 and was further sub-divided prior to the Parliamentary Enclosure Award map of 1834. However, there are many areas where proposed Parliamentary Enclosure did not occur: the land was allotted but remained open and unenclosed. Where field boundaries exist, they are gritstone drystone walls and are localised features in the landscape often defining ownership boundaries.

Settlement, buildings and monuments

The more gentle slopes were used by prehistoric people, as attested by Mesolithic flint scatters, hearths and a possible Bronze Age field system on the moors above Stalybridge. A cluster of Bronze Age ring cairns, cairnfields and earthworks are located on Broomhead Moor. The imposing site of Mam Tor hillfort is one of the largest prehistoric monuments in the Peak District, and other prehistoric features are found along the Great Ridge.

This is a very sparsely settled landscape with occasional isolated gritstone farmsteads and cottages with stone slate roofs. Some of these farmsteads date from the medieval period but the buildings have been subsequently rebuilt. There are also occasional field barns and stock pens within the landscape, associated with sheep farming and constructed from the local gritstone. There are traces of relict agricultural holdings with sites of now demolished farm buildings and sheepfolds.

Transport, access and recreation

The moorland slopes and cloughs are largely inaccessible to transport with the exception of routes that cross the moors such as the Woodhead Pass. There are smaller tracks throughout the landscape largely providing access to farms. Braided hollow-ways provide evidence that this landscape was once more widely travelled through both for trade and commerce outside of the area and to access pasture, water supplies and peat cuttings locally. These hollow-ways can sometimes be highly visible on the moorland slopes and cloughs. Much of this landscape is designated open access land.

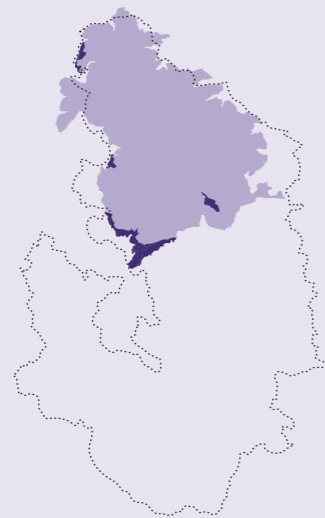
Enclosed gritstone upland LCT



Windy Knowl, above Winnats Pass © Peak District National Park Authority

An enclosed upland pastoral landscape associated with high uplands, ridge tops and slopes. This is a landscape of isolated stone farmsteads, straight roads and regular fields enclosed by drystone walls, largely reclaimed from moorland during Parliamentary Enclosure. Localised boulder fields and rocky outcrops are a feature in places, often associated with patches of remnant moorland vegetation.

This landscape occurs in discrete areas primarily on the western side of the Dark Peak, on lower land running down from the open moorlands. There are two areas in the north, and there is a larger area on the lower south-western flanks of Kinder and the southern slopes of Rushup Edge, as well as an isolated area above Ladybower Reservoir.



Key characteristics

- High uplands and ridge tops with some steeper slopes and localised pockets of peat
- Remnant patches of semi-natural habitats with bracken and gorse, some heather and bilberry. Small remnant woodlands and scattered trees, often in cloughs and along some field boundaries, and some coniferous plantations.
- A regular pattern of medium to large fields of permanent pasture and rough grazing enclosed by gritstone walls
- Isolated gritstone farmsteads with stone slate roofs and tree groups providing shelter

Geology, landform and soils

This landscape is associated with a high and broad gently undulating gritstone plateau, in places rising steeply to higher open moorlands. The underlying bedrock is Millstone Grit.

The variable nature of the geology and landform give rise to a variety of soil types ranging from free-draining podzols on steeper slopes to wetter, peatier soils on gentler summits. All the soils are characterised by their impoverished, acidic origin.

Habitats and species

Although most of the land is now improved to varying degrees for pasture, many patches of semi-natural vegetation still exist along verges, on steeper slopes and even as isolated patches within some fields. Heath-associated species, such as heather, bilberry and gorse are a common feature in many places. Where the soils are wetter species such as purple moor

grass tend to be more common and there are some patches of soft rush, which often support small populations of breeding birds such as snipe.

Tree cover

Historic and ongoing management practices have reduced tree cover in this landscape to low levels. However, there are occasional tree groups, generally adjacent to farmsteads and planted to create shelter around properties, using broadleaved species such as oak, ash and sycamore. There are small remnant broadleaved woodlands and scattered trees, often in cloughs and along some field boundaries. There are also some shelterbelts and occasional blocks of 19th or 20th century coniferous woodland.

Land use

This is a landscape of mostly improved or semi-improved permanent pasture with sheep and cattle grazing and some rough grazing.

There are some reseeded grass leys and very occasional arable fields. Soils are mostly of poor quality and some fields are dominated by rushes or are reverting to moorland, providing habitat diversity. Odin and Engine lead mine soughs are present on the southern flank of Rushup Edge as well as the surface entrance of the Blue John Mine, now an important show cavern.

Enclosure

This is a landscape dominated by Parliamentary Enclosure of open moorland and commons dating from the late 18th and early 19th centuries creating medium to large regular fields. There is some ancient enclosure and some piecemeal and private enclosure which tends to have a slightly smaller and more irregular form than Parliamentary Enclosure. Drystone gritstone walls enclose most fields but there are occasional hedgerows on lower ground.

Settlement, buildings and monuments

Settlement tends to consist of isolated gritstone farmsteads with stone slate roofs often dating from the time that the landscape was enclosed from the 18th century. Although isolated properties are the dominant settlement type there are some small groups of settlement, as at Moorfield, adjacent to Glossop. Settlements often use the natural landform for weather protection. Higher up, towards where the enclosure gives way to the open moorland, the landscape is largely unsettled.

Transport, access and recreation

Where roads exist they tend to be straight with even verges, created from the 18th century onwards as part of the enclosure programme. In places larger, busier roads cross the landscape and these tend to be locally dominant features. Within this landscape type there are some older routes, such as packhorse routes. Small, discrete areas of this landscape are designated as access land.

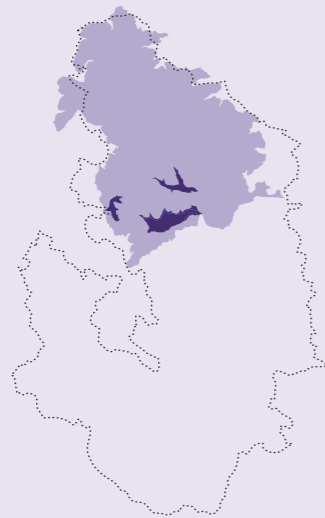
Upper valley pastures LCT



Edale Valley © Peak District National Park Authority

A pastoral landscape with a low lying, undulating topography, rising more steeply in places towards nearby hills. Settlement is restricted to dispersed gritstone farmsteads set within a well defined pattern of small to medium sized fields, mostly bounded by hedgerows, but with some walls. Views are enclosed by valley sides and filtered through scattered hedgerow and streamline trees.

This landscape occurs in three locations at the centre of the Peak District: at Ashop Valley, in Edale and near Kinder Reservoir east of Hayfield.



Key characteristics

- A low lying gently undulating topography, rising towards adjacent higher ground
- Network of streams and localised damp hollows
- Pastoral farmland with small to medium sized fields enclosed by hedgerows
- Dense streamline and scattered hedgerow trees
- Narrow, winding lanes, sunken on slopes
- Dispersed settlement with isolated farmsteads and small clusters of farms and dwellings

Geology, landform and soils

This is a moderate to steeply sloping valley bottom landscape where rivers have eroded through the Millstone Grit creating an undulating topography in the underlying shale. Further variation is created by small streams which dissect the main valleys as they drain the surrounding high moors. In places landslips on higher ground have created a very distinctive hummocky landform which becomes flatter towards the valley bottom.

Slowly permeable, seasonally waterlogged soils are characteristic of the lower lying ground in this landscape, with more free-draining soils on the steeper slopes over gritstone bedrock.

Habitats and species

For the most part this is a moderately intensively farmed pastoral landscape with some ecologically interesting grasslands, particularly in the Edale valley. Biodiversity value is found mainly in surviving unimproved pastures and hay meadows,

which can provide a range of flora such as bird's foot trefoil and common cat's ear. On less well drained land, where the ground is wetter, the pastures often support soft rush and can provide a breeding ground for wading birds.

On sloping ground flushes create wetter areas that can have a significant influence over biodiversity. Flushes differ in character depending on the flow of water, but they generally support a range of species including mosses, sedges and soft rush.

Tree cover

Despite the lack of larger woodlands, tree cover is generally well represented throughout this landscape due to the scattered hedgerow and watercourse trees. Tree cover is densest adjacent to watercourses and through cloughs, where it is often dominated by alder with birch and willow.

Scattered trees also exist adjacent to settlements and along field boundaries. Linear woodlands along watercourses are a feature in places and are sometimes linked to a network of thorn hedgerows. There is plantation woodland associated with Kinder Reservoir.

Land use

This is a pastoral landscape used mainly for sheep and cattle rearing which has been a traditional land use since at least medieval times.

Land is managed to maintain water quality around Kinder reservoir. These valleys are also popular for walking, often used as starting locations for walks on the moors. The popular Pennine Way walking route begins in the Edale Valley and leads to the

famous Jacob's Ladder, an old packhorse route, up onto the plateau above.

Enclosure

Enclosure is very varied within this landscape character type. Field sizes vary from small to large but are generally not regular or geometric. Enclosure usually pre-dates Parliamentary Enclosure and there is evidence that some pre-dates the mid 17th century. Enclosure is often piecemeal and may sometimes represent assarted enclosure, where the enclosure is created from woodland clearance or taken in from moorland. Thorn and some more mixed species hedgerows and drystone walls enclose fields, with some scattered boundary trees, typically oak and ash.

Settlement, buildings and monuments

Settlement is of dispersed gritstone farmsteads with stone slate roofs. Much of this dispersed pattern originates from the medieval period if not before. In the Edale Valley there are distinctive small clusters of the oldest properties: a mixture of farmsteads and cottages known as Booths. This was the name given to the pasturage units that were defined as part of the medieval Royal Forest and let out by bailiffs to villagers and foresters although settlement may have already existed prior to this time.

Other more scattered but post-medieval farmsteads are also common, particularly on the less favourable north-facing slope of the valley. The Woodlands Valley and the Kinder Valley both have a similar dispersed settlement pattern with farmsteads and cottages located along the valley bottoms and lower slopes. Some of these are known to have medieval origins

and appear to have grown up as individual farms. There is a Victorian nucleated settlement in the centre of the valley which grew up in association with the creation of the railway station and Edale Mill.

In the Edale valley a number of distinctive sledways provided key points of access to the moors to enable peat fuel to be cut and brought back down to the valley.

Transport, access and recreation

This landscape has varied road access, the Snake Pass road runs through the Upper Derwent Valley and the Kinder Road gives local access through the valley adjacent to Hayfield. There are other routes including narrow winding lanes that provide access to dwellings and farmsteads as well as older routes, such as holloways, packhorse routes and the likely line of the Roman road from Brough to Melandra. The railway line through Edale, completed in 1894, forms the main route between Manchester and Sheffield. Very limited areas of this landscape character type are designated as access land. Vehicular access within the valleys tends to be limited and they are popular for walking.

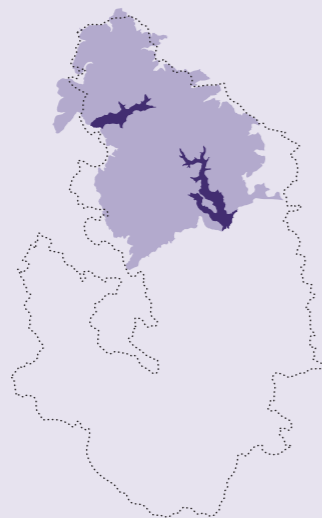
Reservoir valleys with woodland LCT



Howden Reservoir © Peak District National Park Authority

Steep sided valleys dominated by large reservoirs. Some of the steep valley slopes have been planted with interlocking blocks of coniferous and mixed plantation woodland while others support acid grassland and clough woodlands. Views along the valleys are framed by woodland and the slopes rising to moorland.

This landscape occurs in Longdendale and the Upper Derwent Valley.



Key characteristics

- Large reservoirs surrounded by interlocking coniferous and mixed plantation woodland with some remnant semi-natural woodlands
- Steep valley slopes, dissected by cloughs
- Limited settlement (as land was largely cleared of settlement during reservoir construction) leaving occasional isolated gritstone farmsteads
- Pastoral fields bounded by gritstone walls with many relict boundaries

Geology, landform and soils

This is a landscape with a prominent, sloping topography cutting into the gritstone moorland. The underlying geology is mainly hard interbedded gritstones with, in places, softer mudstones which give rise to a fairly unified, steeply sloping landform with narrow valley bottoms. In places the slopes are dissected by deep cloughs.

The soils tend to be shallow and free-draining over gritstone bedrock. Surface water drainage is often impeded by the formation of a thin ironpan and in less steeply sloping areas the soils frequently have a wet peaty surface horizon.

Habitats and species

Historically, this landscape was extensively planted with conifer woodlands. In places patches of ancient semi-natural woodland exist, supporting a range of ground flora species including bilberry and dog's mercury. There is bracken associated with acid grassland on the sloping land in these landscapes.

Tree cover

This landscape is extensively wooded, with large areas of conifer plantations. Some of the plantations were planted on the site of ancient woodlands that were cleared of native trees. Patches of ancient semi-natural woodland are now linked by the areas of plantation woodland to create a heavily wooded landscape.

Land use

Although there is some low intensity pastoral farming, water supply with forestry and recreation around the reservoirs are the dominant land uses in this landscape. The management of water has been important for centuries; a series of 19th-century flood management features are located near Crowden. The river valleys have long been exploited for industry. The Upper Derwent Valley was an important location for charcoal production with burning taking place in many locations on the lower slopes. In the 18th century much of this was produced on an industrial scale and used for iron smelting around Sheffield.

Quarrying was carried out at several sites in Longdendale, particularly towards the west. Several mills were established in Longdendale using the fast flowing River Etherow for power. The reservoirs which now occupy the earlier mill sites in Longdendale were built in the 1840s to supply water to Manchester. In the Upper Derwent Valley the Howden and Derwent reservoirs, constructed in the early 1900s, were built to supply water to nearby settlements in the East Midlands. These are significant landscape structures.

Enclosure

Enclosure pattern is variable in this landscape character type. In the Longdendale Valley enclosure is characterised by small fields enclosed by drystone walls, while in the Upper Derwent Valley walls are often now redundant, within or more commonly at the edges of the plantation woodlands. Much of the enclosure in the Upper Derwent Valley has been modified following the establishment of the reservoirs; prior to this much of the Upper Derwent Valley was deciduous woodland. Enclosure which pre-dates the reservoirs may be ancient although there are no early historical maps to confirm this in Longdendale.

Settlement, buildings and monuments

This is not a significantly settled landscape with just occasional isolated gritstone farmsteads. These are more prevalent in the Longdendale Valley than the Upper Derwent Valley which has a more unsettled character. This landscape was formerly more densely settled. The construction of the later Ladybower Dam led to the submerging of Derwent and Ashopton villages which were small agricultural settlements. Derwent Hall, and the site of a grange and chapel and numerous farmsteads were also submerged. The village of Birchinlee was constructed on the banks of the reservoir as a temporary settlement for construction workers; it was commonly known as Tin Town. The foundations of many of the temporary buildings still survive today. The dams of Derwent, Howden and Ladybower have important historical and cultural context as the training ground of the RAF 617 'Dam Buster' squadron of WWII.

Transport, access and recreation

The Roman fortlet in Longdendale indicates the importance of the valley as a route through the hills. Historically, this landscape contained packhorse routes and tracks through the landscape used for trade into and out of the Derwent Valley and across the Dark Peak moorlands. These routes have sometimes become modern highways; the road through Longdendale is an old turnpike road.

The Longdendale Valley has a historical association with the railway which was completed in 1854 creating the first direct rail link between Manchester and Sheffield via the 3-mile Woodhead Tunnel. The redundant railway line has since been dismantled and is now part of the Trans Pennine Trail (which runs from Liverpool to Hull). There are areas of access land and many popular walking trails around the reservoirs in both Longdendale and the Upper Derwent Valley. The ruins of submerged buildings are revealed in times of drought, and create significant temporary tourist attractions.