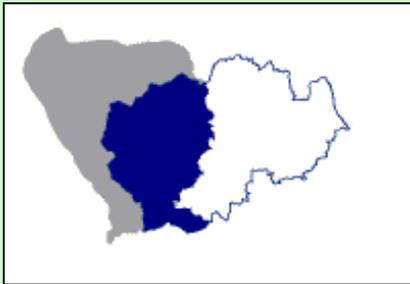


## The North Pennines



- The North Pennines
- The North Pennines Countryside Character Area
- County Boundary



### Key characteristics

- An upland landscape of high moorland ridges and plateaux divided by broad pastoral dales.
- Alternating strata of Carboniferous limestones, sandstones and shales give the topography a stepped, horizontal grain.
- Millstone Grits cap the higher fells and form distinctive flat-topped summits. Hard igneous dolerites of the Great Whin Sill form dramatic outcrops and waterfalls.
- Broad ridges of heather moorland and acidic grassland and higher summits and plateaux of blanket bog are grazed by hardy upland sheep.
- Pastures and hay meadows in the dales are bounded by dry stone walls, which give way to hedgerows in the lower dale.
- Tree cover is sparse in the upper and middle dale. Hedgerow and field trees and tree-lined watercourses are common in the lower dale.
- Woodland cover is low. Upland ash and oak-birch woods are found in river gorges and dale side gills, and larger conifer plantations in the moorland fringes.
- The settled dales contain small villages and scattered farms. Buildings have a strong vernacular character and are built of local stone with roofs of stone flag or slate.
- The landscape is scarred in places by mineral workings with many active and abandoned limestone and whinstone quarries and the relics of widespread lead workings.
- An open landscape, broad in scale, with panoramic views from higher ground to distant ridges and summits.
- The landscape of the moors is remote, natural and elemental with few man made features and a near wilderness quality in places.
- Within the dales there is a strong sense of cultural continuity and visual unity.

## Description

An upland landscape of high moorland ridges and enclosed dales. The topography is massive in scale, with broad plateaux and summit peaks in the west giving way to more divided ridges in the east. The main dales are relatively broad with substantial tributary valleys, many of which are occupied by reservoirs.

Thinly bedded limestones, sandstones, mudstones and shales of the Carboniferous Limestone and Millstone Grit series give rise to gently rounded topography with a strong horizontal grain. Alternating harder and softer strata give a stepped profile to the dale sides. Millstone Grits cap the higher fells and form distinctive flat-topped summits. The underlying rocks are masked by deep peat on higher ground and by glacial clays in the valley bottoms and outcrop only occasionally in the form of low crags or stone bands. Hard igneous dolerites of the Great Whin Sill form more dramatic outcrops and waterfalls in Teesdale. Soils range from deep peats, peaty gleys and podzols on the higher fells to heavy gleys and lighter brown earths in the dales. The higher moors have a severe climate of short summers and cold winters with high levels of rain and snowfall and strong winds.

Land use is largely pastoral with improved and semi-improved pastures and upland hay meadows in the dales giving way to rough grazing and open heather or grass moorland on higher ground. The drier eastern ridges carry a mosaic of acid grassland and heath of heather and bilberry managed by burning for grouse shooting and grazed by hardy upland sheep. The higher, wetter ridge tops and poorly drained plateaux are covered in blanket bog of heather, cotton grass and sphagnum.

Field systems in the upper and middle dale are generally regular in pattern and date largely from periods of enclosure and improvement in the 18th and 19th centuries. Field boundaries are dry stone walls of locally quarried sandstones and limestones, or more rounded boulders from rivers or field clearances. In the lower dale older field systems surround the villages, most dating from enclosures of common town fields in the C17th century. Here walls give way to hawthorn hedges with hedgerow trees of ash, sycamore and oak.

Woodland cover is low although the lower dales are well wooded in places. Upland ash and oak-birch woodlands are found in river gorges and dale side gills. Narrow alder woods or tree lines follow smaller watercourses. Pockets of Juniper scrub are found in the moorland margins. Coniferous plantations are scattered throughout the dales and there are a number of larger forestry plantations in the moorland fringe.

Villages are strung out along the floor of the dale. Those in the lower dale are typically Saxon or medieval in origin, often enlarged in the C18th and C19th centuries by housing for lead mining and quarry workers. These give way in the middle and upper dale to smaller villages, hamlets or farm clusters, many of which have their origins in the lead mining industry as do many of the small farmsteads which line the dale side. Buildings have a strong vernacular character and are built of local stone with roofs of stone flag or slate

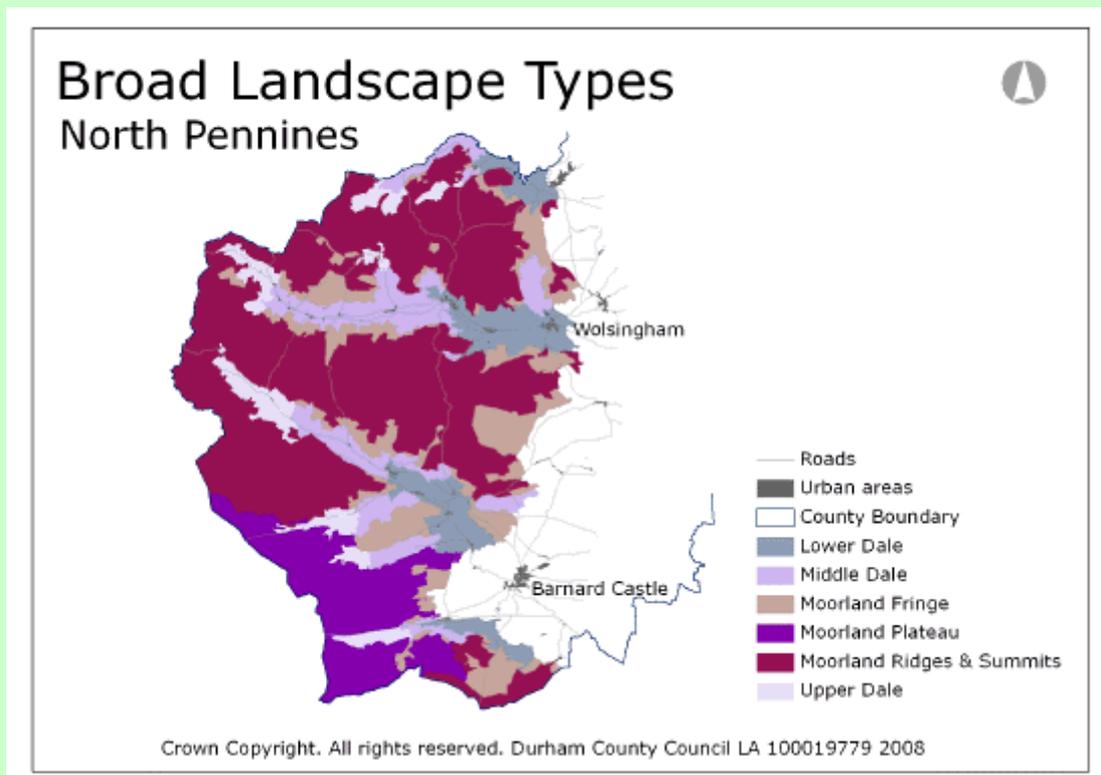
The landscape has been heavily influenced by mining and quarrying in places. Relics of the lead industry include prominent hushes and spoil heaps, shafts, levels, chimneys and derelict mine buildings. There are a number of active quarries and many old abandoned quarries in the dale side and moorland fringe.

The landscape is broad in scale, defined within the dales by the enclosing view line of moorland ridges. There are panoramic views of the dales from higher ground, and across intervening dales to distant ridges and summits. The landscape of the moors is remote, natural and elemental with few man made features and a near wilderness quality in places. Within the dales there is a strong sense of cultural continuity and visual unity.

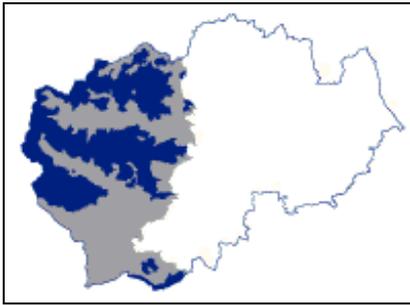
## Broad landscape types

The landscape of the North Pennines can be broadly divided into moorland and dales landscapes. Moorland landscapes include the high *Moorland Ridges & Summits* which separate the main dales, the flatter *Moorland Plateau* of the Stainmore depression, and the *Moorland Fringes* of moorland intakes, rough grazing, wet pasture and coniferous forestry which border the dales.

Dales landscapes are transitional in character. *Lower Dales*, where many of the larger dales villages lie, typically have a mix of old hedgerows and dry-stone walls, frequent hedgerow trees and broadleaved woodlands. *Middle Dales* are more open and dominated by strong patterns of dry-stone walls enclosing upland hay meadows and pastures with scattered hamlets and farm clusters. *Upper Dales* are characterised by rough grazing, wet pastures and isolated farms and are similar in character to the landscape of the Moorland Fringe.



## Moorland Ridges & Summits



- Moorland Ridges & Summits
- The North Pennines
- County Boundary



### Key characteristics

- Broad divided ridges and high flat-topped summits.
- A strong horizontal grain to the topography.
- Grits and limestones outcrop locally in low grey crags and stone bands.
- Hard igneous dolerites outcrop in larger crags and scree slopes.
- Rocky, quick flowing *becks* or *burns* in steep sided gullies.
- Extensive tracts of blanket bog of heather, cotton grass and sphagnum mosses.
- Deep peat exposed in eroded hags and peat edges.
- Drier slopes clothed in upland heath of heather and bilberry or acid grasslands.
- Extensive grazing by hardy hill sheep.
- Burning patterns on grouse moors create a patchwork of older and younger heather.
- Few man made features other than occasional fences, grouse butts, cairns and sheepfolds.
- Unfenced roads marked by snow poles with gates or cattle-grids at the moor wall.
- Relics of lead mining - bell pits, hushes, waste heaps, railways, reservoirs and water leats, smelter flues and chimneys.
- Panoramic long distance views out across unbroken moorlands or adjoining dales.
- A remote and elemental landscape with a near wilderness quality in places.

### Description

Remote upland landscapes of elevated moorland ridges and high summits. The topography of the landscape is heavily influenced by its geology. Alternating strata of Carboniferous limestones, sandstones and softer shales give a stepped profile to slopes and a strong horizontal grain to the topography. Millstone grits cap the higher fells and form distinctive flat-topped summits. Thick layers of peat cover much of the terrain but underlying rocks outcrop locally to form low grey scars and stone bands. Igneous dolerites of the Great Whin Sill form prominent crags and screes. Ridges are broad and deeply divided by valleys on their flanks, drained by rocky, quick-

flowing *becks* or *burns* in steep sided gullies – *gills* or *sikes*. Thick peats are exposed as dark eroding peat edges and hags.

The highest ground is occupied by extensive tracts of blanket bog of heather, cotton grass and sphagnum mosses. This gives way on drier ground to moorland of heather and bilberry or acid grassland on peaty gleys and podzols. The moors are managed for grouse shooting and the extensive grazing of hardy upland breeds of sheep like Swaledales. On heavily grazed moors heather is replaced by 'white moor' dominated by Mat-grass. Burning patterns on grouse moors create a patchwork of older and younger heather, creating a diversity of colour and texture.

The landscape is largely devoid of man made features other than occasional fences, grouse butts, cairns, sheepfolds and biolds. Roads across the moor are unfenced and marked by snow poles with gates or cattle-grids at the moor wall. Occasional radio and telecommunications masts break the skyline.

Relics from the Bronze Age survive in a few places in the form of stone circles, cairn fields and burial mounds – these are generally cryptic features, difficult to find in the moorland heather. Remains of the C18th and C19th lead mining industry - including bell pits, mine entrances, derelict mine buildings, waste heaps, reservoirs and water leats - can be found on some moors following the line of ore-bearing veins. The most prominent in the landscape are smelter flues and chimneys and the deep hushes which scar the hillsides and occasionally notch the skyline.

The landscape is visually very open with panoramic long distance views out across unbroken moorlands or adjoining dales. The visual simplicity of the landscape coupled with a severe climate of high rainfall, cold winters and short summers gives it an austere and elemental character. In the heart of the moorlands, where man-made features are few, the landscape has a near wilderness quality.

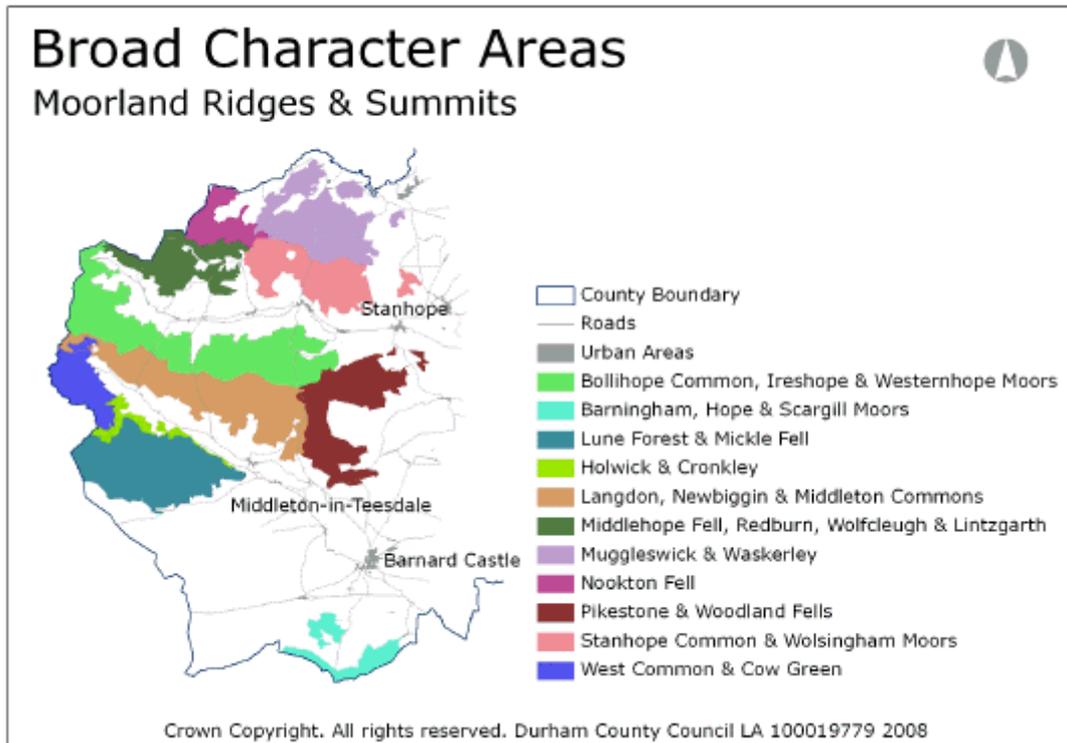
## Broad Character Areas

The Moorland Ridges & Summits landscape type is represented by eleven broad character areas.

**Barningham, Hope & Scargill Moors.** Moorland slopes to the south of the Greta around the large forestry plantation of The Stang. The high ridge top of Hope moor is clothed in blanket bog or the 'white moor' of modified bog. The lower moors of Barningham Moor and Scargill Low Moor are drier heath with a mosaic of burning patterns. Barningham moor contains relics of a Bronze Age ritual landscape including a stone circle, cup and ring marked stones and burial mounds.

**Bollihope Common, Ireshope & Westernhope Moors.** The high watershed between Weardale and Teesdale and the South Tyne is divided into a series of moorland valleys. The high ridges of Burnhope Moor in the west are clothed in blanket bog; elsewhere the moors are heavily grazed white moor of acid grassland and modified bog. There are lead mining remains in some valleys together with a number of old ganister and limestone quarries. The moors are crossed by minor roads connecting the dales. There are dramatic long distance views from higher ground across Weardale to the northern moorland ridges.

**Holwick & Cronkley.** The Great Whin Sill is exposed in prominent scars along the southern flanks of Teesdale at Holwick, Cronkley and Falcon Clints and in the dramatic waterfalls of Cauldron Snout and High Force. Low moors lie along the foot of the scars at Cronkley Pasture, and open Juniper woods fall to the fast flowing and peaty River Tees. Whinstone quarries follow the outcrop including a currently active quarry at Force Garth.



**Langdon, Newbiggin & Middleton Common.** The southern slopes of the high watershed between Teesdale & Weardale are divided into a series of moorland valleys. The ridge top and outlying spurs are clothed in blanket bog. The valleys are heavily grazed 'white moor' of acid grassland and modified bog. The landscape is rich in lead mining remains including prominent hushes such as Coldberry Gutter, and there are a number of old ganister quarries high on the moorland ridge. The moors are crossed by minor roads connecting the dales. There are dramatic long distance views from higher ground across Teesdale to the summits ridge beyond.

**Lune Forest & Mickle Fell.** High moorlands of blanket bog lying in the western summit ridge of the North Pennines. At 758m AOD Mickle Fell is the highest point in the county, its flat-topped summit fringed with screes and stone bands. The ridge is divided by minor valleys in the south where it borders onto Lunedale, and in the east falls with a stepped profile to Teesdale where lower moors of acid and calcareous grassland lie above the Whin Sill scars of Holwick and Cronkley. A remote wilderness accessed by few paths or tracks with dramatic views along the summit ridge and south across the moorland plateau.

**Middlehope Fell, Redburn, Wolfcleugh & Lintzgarth.** The high watershed between Weardale and Allendale is divided by the moorland valleys of Rookhope and Middlehope. The ridge is clothed in blanket bog, the valleys and moorland slopes in white moor of acid grassland. The landscape has been heavily affected in places by lead mining and quarrying, most notably in Rookhope Head. The moors are crossed by minor roads connecting the Durham dales with Tynedale and Allendale. There are panoramic views from high ground across the surrounding dales to the moorlands beyond.

**Muggleswick & Waskerley.** The broad ridge between Weardale and Derwentdale is divided by a number of valleys of dry heather grouse moor with prominent burning patterns and frequent shooting butts. Several small reservoirs lie in the eastern valleys. Edmundbyers Common contains many lead mining remains including the landmark Jeffries and Sikehead chimneys. The moors are crossed by a number of well-used roads connecting the dales, and by the Waskerley Way on the old Stanhope-Tyne railway line.

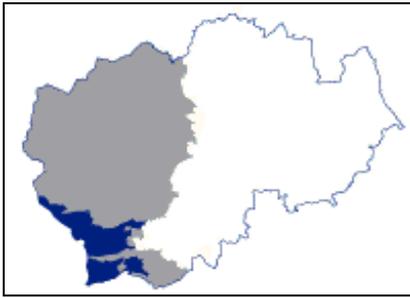
**Nookton Fell.** High flat-topped ridges of blanket bog encircle the moorland valley of the Nookton Burn. The moors are crossed in the east by a minor road connecting Rookhope and Derwentdale but are otherwise remote and accessed by few paths or tracks.

**Pikestone & Woodland Fells.** A broad arc of moorland valleys of dry heather grouse moor falling from a high ridge of blanket bog marked by a series of low pikes including Five Pikes, Pawlaw Pike and Islington Hill. The moors are drained by tributaries of the Bedburn Beck, which lie in incised steep sided ravines and fall to Hamsterley Forest in the moorland fringe.

**Stanhope Common & Wolsingham Moors.** Moorland ridges and valleys on the northern flanks of Weardale. Blanket bog on the ridge-tops gives way on the slopes to drier heath with a mosaic of burning patterns. The moors are crossed by the main road between Weardale and the Derwent valley, and by the Waskerley Way, which follows the Crawleyside & Weatherhill Inclines. There are commanding views across Weardale from the higher ground.

**West Common & Cow Green.** High moorlands of blanket bog which include the gently sloping moorland ridge of Herdship and Widdybank Fells and the remote moorland valley headwaters of the River Tees. The large Cow Green reservoir occupies the lower reaches of the valley. Sugar limestones on Widdybank Fell support calcareous grasslands which contain rare Arctic or Alpine plant communities including Spring Gentian and the Teesdale Violet. An austere wilderness accessed by few paths or tracks with dramatic views to the west of the higher Pennine summits.

## Moorland Plateau



- Moorland Plateau
- The North Pennines
- County Boundary



### Key characteristics

- High moorland plateau.
- Gently rolling, almost flat, terrain cut into by steep sided gullies.
- Occasional small, low, flat-topped, summits.
- Carboniferous rocks masked by deep peat which is exposed in eroded hags and peat edges.
- Millstone grits outcrop locally in summits, gullies and stone bands.
- Continuous blanket bog of heather, cotton grass and sphagnum mosses.
- Upland heath and acid grassland in drier moorland fringes.
- Extensive grazing by hardy hill sheep.
- Burning patterns on grouse moors create a patchwork of older and younger heather.
- Few man made features other than occasional fences, grouse butts, cairns and sheepfolds.
- A remote and inaccessible landscape with few roads or tracks.
- A broad scale landscape with long distance views across open moorland to distant summits.
- An exposed, elemental and simple, often bleak, landscape with a near wilderness quality.

### Description

High moorland plateau. The gently rolling, often flat, topography of the plateau is the legacy of a major ice sheet in the last glacial period. Sandstones, mudstones and shales of the Carboniferous Millstone Grit series are generally masked by a thick blanket of peat and are rarely expressed at the surface. They outcrop locally in small rocky flat-topped summits (*Shacklesborough, Goldsborough*) of resistant sandstones, or as screes on the sides of the narrow steep sided gullies, *gills* or *sikes*, which drain the plateau. Thick peats are exposed as dark eroding peat edges and hags.

Much of the landscape is covered by near continuous blanket bog of heather and cross-leaved heath, bilberry and crowberry, cottongrass, deergrass and bog mosses. This is replaced in the drier moorland fringes to the east by heather moorland or acid grassland. The moors are managed for grouse shooting and the extensive

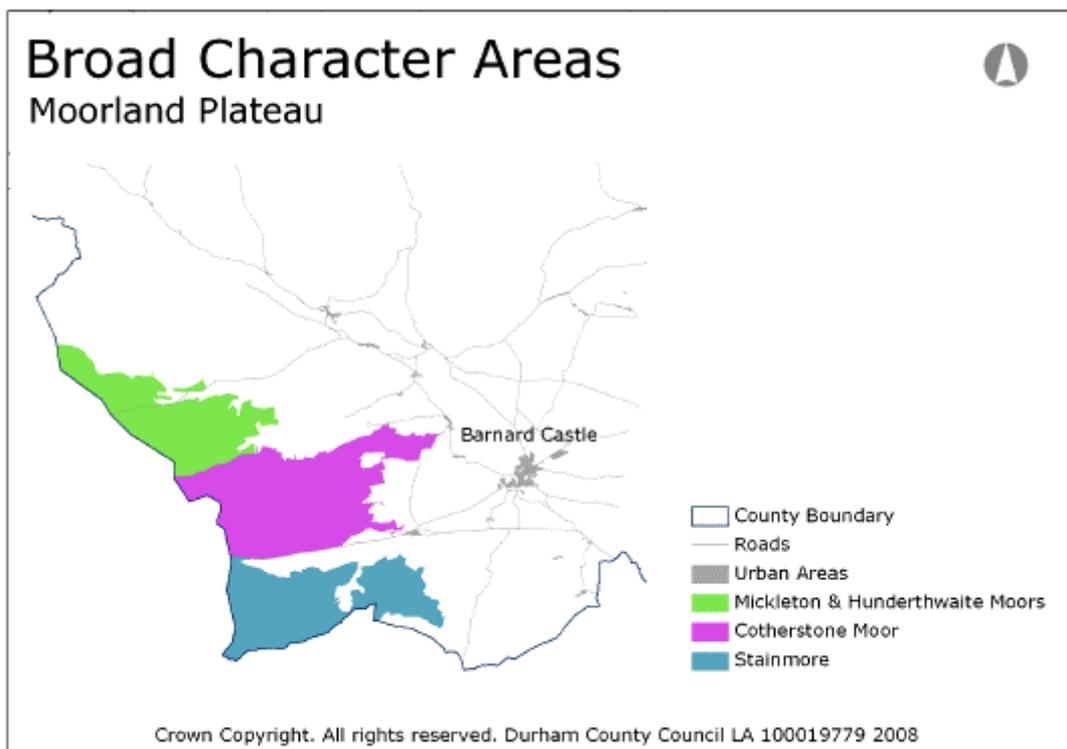
grazing of hardy upland breeds of sheep like Swaledales. In places the bog has been degraded by drainage or *gripping* to improve its grazing potential, and this together with high stocking levels promotes a shift towards grass or sedge dominated vegetation. On grouse moors burning patterns create a patchwork of older and younger heather creating a diversity of colour and texture. Some of the wetter bogs are too wet for heather burning in most years.

The plateau is remote and inaccessible and is crossed by very few roads, tracks or footpaths. The landscape is largely devoid of man made features other than occasional fences, grouse butts and sheep folds in the more accessible moorland edges. Relics from the Bronze Age survive in a few places (Ravock Moor) in the form of cairn fields but are difficult to find in the featureless moor.

The landscape is visually open and broad in scale with panoramic views to distant summits. A remote, elemental, often bleak landscape of great simplicity with a severe climate of high rainfall, cold winters and short summers. This coupled with an almost complete absence of man-made features gives it a near wilderness quality.

### Broad Character Areas

The Moorland plateau landscape type is represented by three broad character areas.

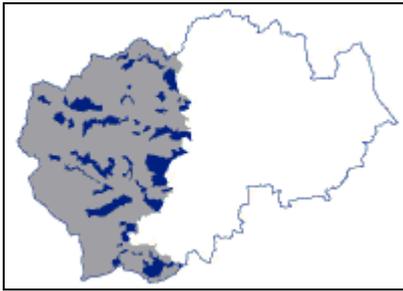


**Mickleton and Hunderthwaite Moors.** Extensive tracts of flat or gently rolling blanket bog incised by deep moorland gills and the valleys of the Lune and Balder. Open sweeping horizons are punctuated by low summits along the western watershed and the higher moors of Lune Forest and Mickle Fell to the north.

**Cotherstone Moor.** Extensive tracts of flat or gently rolling blanket bog incised by deep moorland gills. The distinctive low flat-topped summits of Shacklesborough and Goldsborough are notable features on the open sweeping horizon. The moors of Ravock contain the remains of Bronze Age cairn fields.

**Stainmore.** Extensive tracts of almost flat blanket bog incised by deep moorland gills. The low but pronounced moorland edge of White Brow overlooks the River Greta on Bowes Moor. The higher moorland ridge of Arkengarthdale Moor forms a strong horizon to the south.

## Moorland Fringe



- Moorland Fringe
- The North Pennines
- County Boundary



### Key characteristics

- Upland landscape of improved moorland fringes, intakes and allotments.
- Varied topography including valleys and upper dale sides.
- Carboniferous rocks bare of drift or covered by boulder clays.
- Hard igneous dolerites outcrop locally in low crags
- Shallow, infertile or waterlogged peaty soils.
- Wet, rushy pastures, rough grazing and enclosed moorland
- Large regular fields bounded by low stone walls and wire fences.
- Isolated farms connected by straight roads.
- Scattered conifer plantations and shelterbelts - occasional large tracts of commercial forestry.
- Relics of the lead mining industry – mine buildings, waste heaps, smelter flues, reservoirs and hushes.
- Visually open and often broad in scale with extensive views across adjacent dales and moors.
- A remote and tranquil landscape on the margins of settlement and agriculture.

### Description

An upland fringe landscape of marginal land lying between the open moors and the more settled, fertile dales. The topography of the moorland fringe is varied and includes minor valleys branching off the main dales and the upper slopes of the dale sides. On the convex slopes of higher dale sides Carboniferous sandstones, limestones, mudstones and shales are bare of drift and the terrain often has a stepped quality reflecting the alternating strata of harder and softer rocks. On lower ground these are masked by glacial drift of boulder clays. Soils are impoverished and often waterlogged - peaty gleys, podzols and heavy surface water gleys.

This is a pastoral landscape of wet, rushy pastures and rough grazing of acid grassland, enclosed from moorland wastes in successive waves of agricultural improvement and expansion since the late C18th. Regular grids of parliamentary enclosures or larger moorland intakes are bounded by low dry-stone walls or wire fences.

The diversity of grasslands, grazed by hardy upland sheep and beef cattle, creates a patchwork of muted and brighter greens reflecting varying degrees of improvement by drainage, liming, and fertilising.

The landscape is sparsely settled with a scattering of isolated farmsteads dating from the period of enclosure – most are small and built of stone with roofs of stone flag or slate. In Teesdale the farms and field barns of the Raby estate in Teesdale are painted white. Roads and tracks also date from the period of enclosure and are characteristically straight and uniform in width.

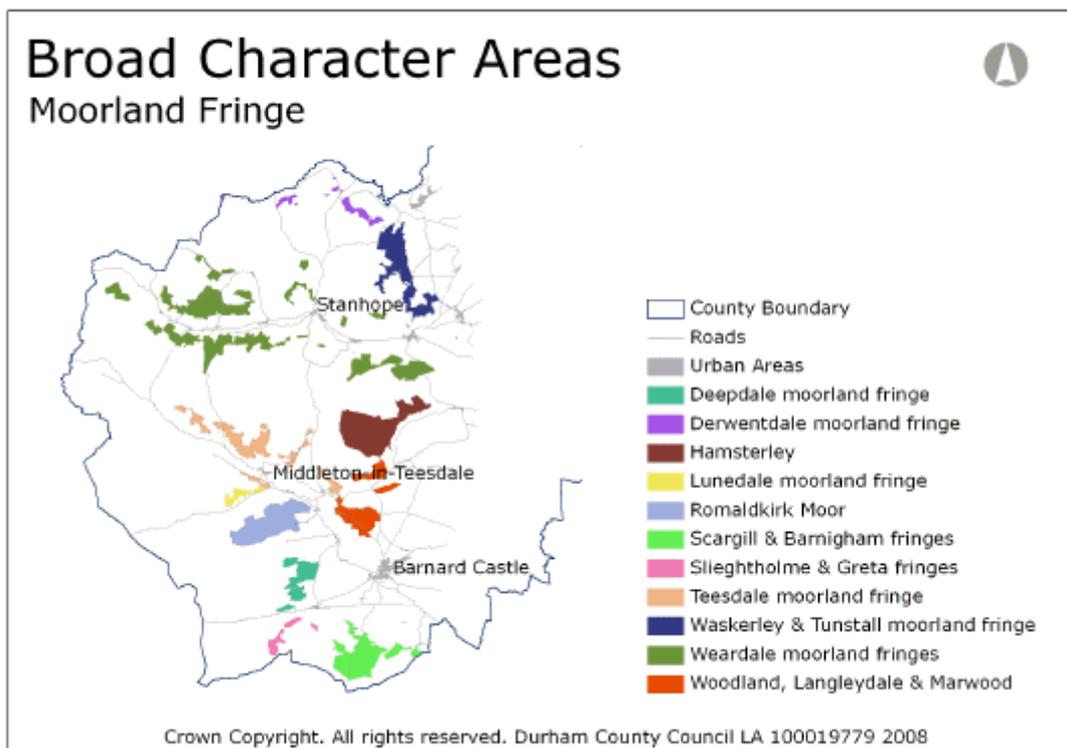
The landscape is generally open with few trees or woodlands. There are occasional clumps of sycamore planted as shelter trees around exposed farms, and scattered conifer plantations and shelterbelts. Parts of the moorland fringe have been given over to larger scale forestry with large Forestry Commission holdings at *Hamsterley Forest* and *The Stang*.

Relics of the lead mining industry are common in parts of the moorland fringe. Some of the enclosures and farmsteads date from the expansion of the lead industry and the miner-smallholder economy it generated. Derelict mine buildings, waste heaps, smelter flues, reservoirs and hushes are locally prominent features.

The landscape is visually open and broad in scale with extensive panoramic views across adjacent dales and moors. A remote and tranquil landscape on the margins of settlement and agriculture, often with a neglected 'run-down' quality.

### Broad Character Areas

The Moorland Fringe landscape type is represented by eleven broad character areas.



**Deepdale Moorland fringe.** Open flat or gently rolling pastures and rougher moorland intakes in the eastern edges of the moorland plateau. Large regular enclosures bounded by stones walls and wire fences cover Battle Hill. Smaller and less regular field systems surround older farms at Loups Hill, Stony Keld and Levy Pool, the last surviving heather thatched farm in the North Pennines. There are areas of MOD land at Battle Hill Range and abandoned bunkers at Stony Keld.

**Derwentdale Moorland fringe.** Rough pastures, allotments and moorland intakes from a variety of periods fringing the upper Derwent valley, in the moorland valley of the Burnhope burn west of Edmundbyers and across Muggleswick Park to Hisehope. Very open landscapes intimately associated with the surrounding moors.

**Hamsterley.** Afforested moorland fringes of the Bedburn valley. The large Hamsterley Forest occupies much of the area. Tributary valleys of the Bedburn Beck lie in deep deep-sided ravines within the forest.

**Woodland, Langleydale and Marwood fringes.** Pasture and rough grazing fringing Langleydale and the Arngill valley. Large regular parliamentary enclosures are crossed by straight enclosure roads. There are scattered conifer plantations and shelterbelts. White painted farms of the Raby estate are scattered across the area. Wet rushy pasture and wetlands lie along the floor of the steep-sided ravine of the Arngill. Large regular enclosures of rough grazing bounded by stone walls and wire fences cover the eastern part of Woodland Fell.

**Lunedale moorland fringe.** Open pasture and rougher moorland intakes on the northern flanks of Lunedale and the higher ground of Harter Fell and Moor Rigg. Regular enclosures on the daleside give way to large open intakes on the ridge. The broken topography of the ridge associated with the downthrown Lunedale fault gives a distinctive undulating profile to the skyline. The wooded burial mound of Kirkcarrion on the ridge is a notable landmark.

**Romaldkirk Moor.** A low ridge to the east of the Moorland Plateau separates Lunedale and Baldersdale. Large regular enclosures of wet pasture, rough grazing and enclosed heather moorlands are crossed by straight roads and tracks. The landscape is open with scattered small conifer plantations. The large Brownberry plantation lies on slopes falling to the Grassholme reservoir. Isolated farms associated with the C19th enclosures are scattered across the ridge.

**Sleightholme & Greta Moorland Fringes.** Open pasture and rough moorland intakes in the edges of the Moorland Plateau of Stainmore Forest fringing the valleys of the Greta and the Sleightholme Beck. The beck is incised in a narrow steep side gill surrounded by irregular walled pastures and larger irregular moorland intakes.

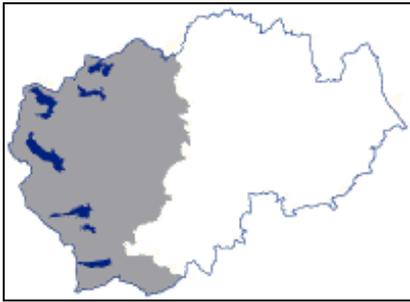
**Teesdale moorland fringes.** Open wet pastures and rough grazing on the upper northern slopes of Teesdale and in the Hudeshope Valley. Large regular field systems of dry stone walls edge the moors along the dale. The large Stobgreen Plantation lies on the daleside above Eggleston. The Hudeshope valley contains many lead mining remains including the notable Skears hushes which deeply scar its eastern slopes.

**Scargill and Barningham fringe.** The Stang forest lies on steep slopes overlooking the Greta Valley, falling to flat or gently undulating wet pastures and larger enclosures of rough grazing fringing Barningham and Scargill Low Moors. Small conifer plantations are scattered across the area. Tree lines follow the sinuous Scargill and Gregory becks. There are a small number of isolated farms.

**Waskerley & Tunstall Moorland fringe.** Rough pastures, allotments and moorland intakes in the valley heads and surrounding ridge tops of the Tunstall, Horsleyhope and Houselop Beck valleys. The landscape is open in places but with concentrations of conifer plantations in the upper Tunstall valley and Salter's Ridge. Several abandoned railway lines cross the ridge including the Waskerley Way. Salter's Gate Plantation contains abandoned MOD bunkers and security fences.

**Weardale Moorland fringes.** Open pastures and moorland intakes of rough grazing on the upper dale sides and the lower reaches of moorland valleys along the edges of Weardale. Field patterns are regular with large fields bounded by dry stone walls and wire fences. Isolated farms are served by straight roads and tracks. The small streams of tributary valleys are incised in steep sided gills. There are occasional conifer plantations.

## Upper Dale



- Upper Dale
- The North Pennines
- County Boundary



### Key characteristics

- Upper reaches of the Pennine dales.
- Varied valley topography.
- Carboniferous rocks bare of drift or covered by glacial boulder clays.
- Fast flowing rocky streams.
- Shallow, infertile or waterlogged soils.
- Wet rushy pastures, upland hay meadows and rough grazing in the moorland fringes.
- Regular field patterns of dry stone walls. Scattered field barns.
- Few trees or woodlands - occasional concentrations of conifer plantations.
- Scattered small farms with occasional farm clusters and hamlets.
- Relics of the lead mining industry – mine buildings, waste heaps, smelter flues, reservoirs and hushes.
- Major reservoirs in some dales.
- Visually open but enclosed by encircling moorland ridgelines.
- Remote and tranquil landscapes on the margins of settlement and agriculture

### Description

A pastoral landscape at the limits of agriculture high in the upper reaches of the Pennine dales. The topography of the dale floor in the upper dales is varied. Most upper dales are relatively shallow and broad, incised by narrow gullies – *gills* or *sikes* – cut by rocky, fast flowing streams. The underlying Carboniferous sandstones, shales and limestones are generally masked by glacial boulder clay and morainic drift. Soils are heavy waterlogged or peaty gleys.

This is a pastoral landscape of wet, rush-infested pastures, upland hay meadows and rough grazing enclosed from the moor. Field patterns tend to be regular and date from enclosure and agricultural improvements from the late C18th onwards. Fields are generally large and bounded by low dry stone walls or wire fences, often in a poor state of repair. The diversity of grasslands, grazed by hardy upland sheep and beef cattle, creates a patchwork of

muted and brighter greens reflecting varying degrees of improvement by drainage, liming, and fertilising. There are scattered stone field barns and sheepfolds.

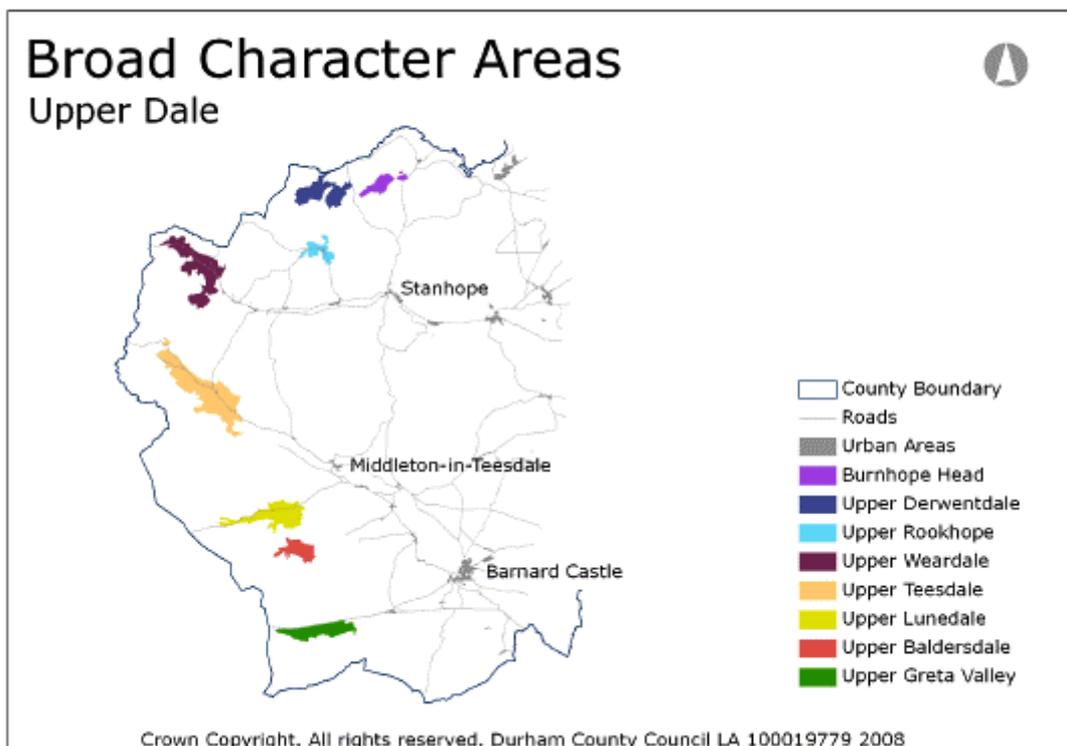
Most upper dales are open or sparsely wooded with occasional small streamside woods, sparse lines of alder trees and willow scrub following watercourses, or isolated conifer plantations or shelterbelts. In places land in the dale head has been afforested with large regular blocks of pine and spruce.

Small farms and farm clusters are scattered across the dale floor and onto the dale sides, occasionally marked by wind-blown groups of sycamore or pine shelter trees. In Teesdale the tenanted farms of the Raby estate are painted white. Many farms date from the expansion of the lead mining industry which brought miner-small holders to the limits of agriculture. Relics of the lead mining industry include derelict mine buildings, waste heaps, smelter flues, reservoirs and hushes. The heads of a number of dales are now occupied by large reservoirs.

The landscape is visually open and exposed and defined by the encircling moorland skyline. A remote and tranquil landscape on the margins of settlement and agriculture, often with a rather bleak and neglected quality.

### Broad Character Areas

The Upper Dale landscape type is represented by seven broad character areas.



**Upper Derwentdale.** A shallow branching dale head divided by the Nookton and Boltshope Burns. The burns are incised in steep sided gills clothed in heathland, birch woodland or conifer plantations. Walled pastures on lower ground give way to a patchwork of rougher grassland, moorland intakes and conifer plantations. The dalehead contains many lead mining remains, including the prominent smelter flue and landmark chimneys above Ramshaw. There are scattered farms and building clusters including miner's smallholdings on the moorland edge at Boltshope Park.

**Burnhope Head.** Open pasture and rough grazing in the branching valley of the Burnhope Burn west of Edmundbyers. Heather moorlands sweep down to the burn in places. Old pasture woods of birch, rowan and alder lie on the northern slopes at Peddam's Oak.

**Upper Rookhope.** A narrow dalehead enclosed by steep moorland slopes. The village of Rookhope lies on the narrow dale floor surrounded by walled pastures and meadows which give way abruptly to moorland. Along the valley to the west, large intakes of rough pasture merge seamlessly with the surrounding moors. The dalehead contains many lead mining remains, including the notable smelter flue arch at Lintzgarth, the Boltslaw Incline and areas of disturbed land west of Rookhope village.

**Upper Weardale.** A branching dalehead divided by the Burnhope, Wellhope & Killhope burns. Large conifer plantations border onto the surrounding moors and fringe the Burnhope Reservoir. Rushy pastures and meadows follow the incised valley of the River Wear. Larger intakes of rough grazing merge with the grass and heather moor of the encircling ridges. The dalehead contains many industrial remains, including the former Killhope lead mine, and has a relatively dense pattern of scattered farms and building clusters west of the village of Cowhill.

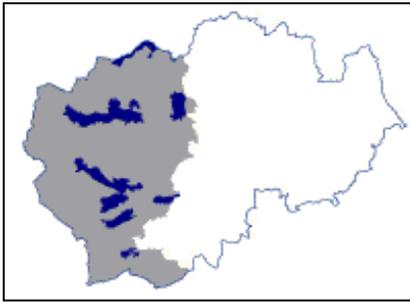
**Upper Teesdale.** A broad open dalehead with an undulating dale floor of walled rushy pastures and hay meadows. Large regular intakes of rough grazing rise up the daleside to the moors. White painted farms are scattered across the dale floor. The quick flowing River Tees runs below the high dolerite cliffs and screes of Cronkley Scar. A remote and dramatic landscape encircled by high moors.

**Upper Lunedale.** A shallow dalehead flanked by the moorland plateau of Mickleton Moor to the south and the steeper slopes of Lune Moor to the north. Selsset Reservoir occupies much of the dale floor. Wet rushy pastures and larger intakes of rough grazing are incised by the gills & ravines of the Lune and its tributaries. To the south of the reservoir conifer plantations and rough grazing land fringe the open moors. A remote and austere landscape with long distance views across the moorland plateau to the south and west.

**Upper Baldersdale.** A small shallow dalehead largely occupied by the Balderhead reservoir. Regular walled pastures follow the northern banks of the reservoir and larger intakes of rough grazing merge gradually with the moorland plateau beyond. A remote and austere landscape with views across the moors taking in the distinctive summit of Shacklesborough to the south.

**Upper Greta Valley.** The shallow dalehead of the Greta valley follows the Stainmore Gap across the moorland plateau between Bowes Moor and Stainmore Forest. The course of the Greta is lined with low limestone scars in places and crossed by a natural limestone arch at God's Bridge. A very open landscape of wet rushy pastures divided by low walls or wire fences, dominated in places by the trans-pennine A66, with distant views out across the moorland plateau.

## Middle Dale



- Middle Dale
- The North Pennines
- County Boundary



### Key characteristics

- Broad upland valleys with moderately sloping, often gently stepped valley sides, incised by narrow steep-sided gills
- Carboniferous rocks overlain on lower slopes by boulder clays. Hard igneous dolerites outcrop locally in prominent scars.
- Narrow floodplains of alluvium or glacial sands and gravels.
- Rocky fast flowing rivers and streams.
- Heavy, often waterlogged, clay soils with more fertile brown earths on valley floors.
- Improved and semi-improved pastures and flower-rich upland hay meadows.
- Strong regular or sub-regular patterns of dry stone walls with occasional ash, oak and sycamore field trees.
- Sparsely wooded. Narrow ash and oak-birch woodlands along rivers and streams and dale side gills. Scattered plantations of pine, larch or spruce.
- Small villages, hamlets and farm clusters follow valley floor roads – scattered farms and field barns on the dale side. Buildings of local stone with roofs of stone flag or slate.
- Active and abandoned limestone and whinstone quarries prominent on the dale side.
- Relics of the lead mining industry – mine buildings, waste heaps, smelter flues, reservoirs and hushes.
- Major reservoirs in some dales.
- Visually open but enclosed by encircling moorland ridgelines.
- Settled tranquil upland landscapes with a strong sense of cultural continuity.

### Description

Broad upland valleys with moderately sloping valley sides, incised by narrow steep-sided gills. Alternating strata of Carboniferous limestones, sandstones and softer shales and mudstones give a gently stepped profile to the upper dale side in places. On lower slopes they are overlain by boulder clays. Hard igneous dolerites with a vertical columnar grain outcrop locally in prominent scars. Rocky fast flowing rivers and streams with braided boulder-strewn channels run through narrow floodplains of alluvium or glacial sands and gravels. Locally,

outcropping dolerites form spectacular waterfalls. Soils are heavy, often waterlogged clays with more fertile brown earths on the valley floors.

Improved and semi-improved pastures, occasionally rush-infested, and flower-rich upland hay meadows cover the valley floor and dale side. Field systems are regular or sub-regular in pattern and date largely from C18<sup>th</sup> and C19<sup>th</sup> enclosures. Strong patterns of dry stone walls are prominent features of the dale-side. Walls are of locally quarried sandstones, limestones and whin stone, or rounder boulders from river beds and field clearances. Tree cover is generally sparse with scattered field and shelter trees of ash, oak and sycamore.

The middle dale is generally sparsely wooded, with narrow ash, alder or oak-birch woodlands along rivers and streams, in dale side gills or on steeper dale sides. Plantations of pine, larch or spruce are scattered across the dale side, with localised concentrations creating some heavily wooded local landscapes.

Small villages, hamlets and farm clusters follow valley floor roads. Many of these have their origins in the lead mining industry, as do many of the small farms that line the dale sides, often close to the moor wall at the limits of agriculture. Buildings are of local stone with roofs of stone flag or slate and have a strong vernacular character.

Other legacies of the lead mining industry include mine buildings, waste heaps, smelter flues, reservoirs and deep hushes which scar the dale side. Active and abandoned quarries are prominent on the dale side following outcrops of the Great Limestone and the Great Whin Sill. Large water supply reservoirs occupy a number of dales.

The landscape is visually open but enclosed by encircling moorland ridgelines. A settled and largely tranquil upland landscape that, with its vernacular buildings, field boundaries and traditionally managed meadows and pastures, has a strong sense of both visual unity and cultural continuity.

## **Broad Character Areas**

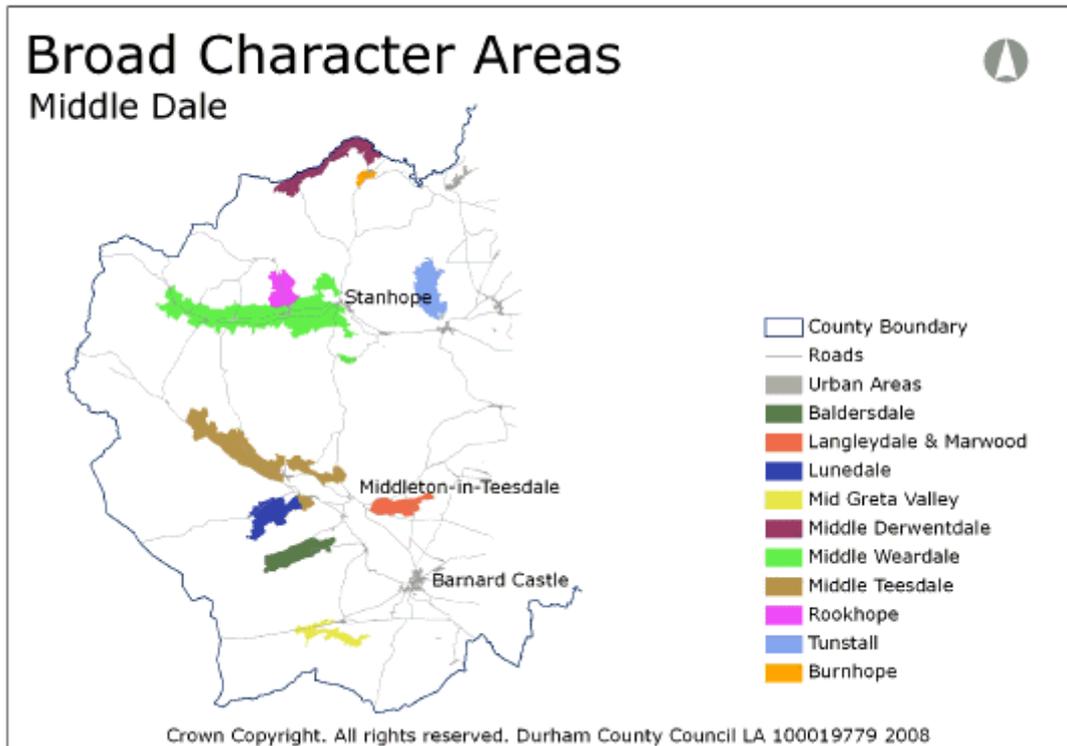
The middle dale landscape type is represented by eight broad character areas.

**Baldersdale.** A narrow, shallow dale of walled pastures and meadows falling to the Blackton and Hury reservoirs. Field systems are generally old (pre-enclosure) with irregular or sub regular patterns and scattered field trees (ash), particularly in the east. The incised valley of the lower Balder contains ancient ash and oak woodland. Scattered farms, hamlets and building clusters follow the daleside roads. A visually open landscape with views across the surrounding low moors and moorland fringes.

**Langleydale & Marwood.** A narrow, shallow dale and associated areas of high ground lying within the ridge to the north of lower Teesdale. The head of the valley is deeply incised by gills and ravines. Improved and rushy pastures are enclosed by a regular network of stone walls and interspersed by conifer plantations and shelterbelts. A sparsely settled dale with scattered white painted farms and field barns.

**Lunedale.** A broad, shallow and asymmetrical dale of walled pastures and meadows lying between the high moors of Lune forest and the low plateau of Romaldkirk Moor. The northern slopes have an irregular rolling topography, incised by shallow gills, and have older field systems and frequent farms and building clusters. The southern slopes are more uniform and carry regular grids of parliamentary enclosures, straight enclosure roads and isolated farms. Grassholme reservoir occupies much of the dale floor.

**Mid Greta Valley.** A shallow dale of walled pastures & meadows between the low moorland plateaux of Ravock and Gilmonby moors. Field systems are generally regular, and isolated farms are strung out along the dale floor. The landscape is visually open with few trees or woodlands and is dominated in places by the busy A66.



**Mid Derwentdale.** A broad, shallow, and heavily wooded dale which straddles the county boundary. In the east the large Derwent reservoir occupies much of the dale floor. Parkland and estate landscapes around Ruffside Hall are heavily wooded with large blocky conifer plantations separated by large enclosures of improved pasture. Estate buildings have steeply pitched roofs and gabled upper storeys. In the west the Derwent lies in a steep sided wooded ravine with a flat and narrow floor between regular walled enclosures of improved pasture on the gently sloping dale sides above. Isolated farms are scattered along the valley roads.

**Burnhope.** The small shallow dale of the Burnhope Burn branches off from Derwentdale south of Edmundbyers. The Burnhope Burn carves an incised meandering course in the floor of the dale, marked in places by tree lines or narrow riverside woodlands. Improved or wet rushy pastures fall from the surrounding moors, bounded by dry stone walls and wire fences.

**Mid Weardale.** A broad and deep dale with a narrow dale floor. The dale is bounded by high moorland ridges divided by numerous tributary valleys. Older field systems of pastures and meadows bounded by dry stone walls are found on the south facing daleside and the dale floor. Later, more regular, enclosures are found on the higher dale side. The landscape is generally open with few trees or woodlands. Small ash and oak woodlands are found in daleside gills, and conifer plantations are scattered across the daleside. Villages, hamlets and building clusters lie along the roads of the dale floor, and isolated farms are strung out along the daleside and moorland edge. The landscape has been heavily influenced by mineral workings with many lead mining remains and active limestone quarries.

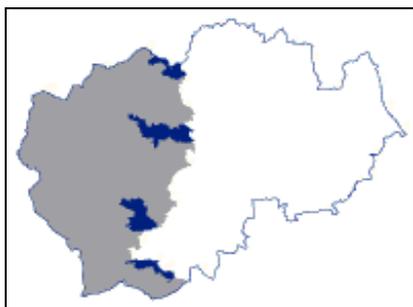
**Mid Teesdale.** A broad and deep dale with a broad dale floor. The southern edge of the dale is defined by Holwick Scar, an outcrop of the Great Whin Sill, which rises from the dale floor to the moorland edge. The northern slopes are divided by tributary valleys. The fast flowing & peaty River Tees flows over dramatic waterfalls at High Force and Low Force. Older field systems of dry stone walls with frequent oak and ash trees are found around pastures and hay meadows on the dale floor. Later field systems with more regular patterns are found on the northern daleside. Hamlets, farmsteads and farm clusters follow roads along the dale floor and the

higher daleside. North of the Tees the white painted buildings of the Raby estate give a highly distinctive character to the dale.

**Rookhope.** A steep sided valley penetrating deep into ridge north of Weardale. Open walled pastures with scattered coniferous plantations fall to the Rookhope Burn, incised by narrow wooded denes. Steeper slopes along the tree-lined burn are covered by open ash woodlands. The woodlands and steep dale sides give a strong sense of enclosure in places. Isolated farms are scattered across the daleside.

**Tunstall.** A broad heavily wooded dale penetrating deep into Weardale's northern ridge. Tunstall reservoir lies in its upper reaches. The western slopes fall gently to the reservoir or to the narrow dale floor, with large regular enclosures of improved pasture bounded by walls and fences, and numerous plantations, narrow gill woods and tree lines. Handsome buildings associated with the reservoir together with exotic trees in the gardens of lodges and private houses give the landscape an ordered domestic character. The eastern side has a stepped profile with large ancient oak woods, rough pasture and coniferous plantations on the lower slopes.

## Lower dale



- Lower Dale
- The North Pennines
- County Boundary



### Key characteristics

- Broad valleys with narrow floodplains or gorges on the valley floor.
- Winding, rocky fast flowing rivers.
- Carboniferous rocks covered by glacial drift, river gravels or alluvium.
- Limestones, sandstones and shales outcrop occasionally on the sides of gorges and dale side quarries.
- Heavy clay soils with more fertile brown earths and alluvial soils on the dale floor.
- Pastoral farmland of improved and semi-improved pastures.
- Old field systems with sub regular or linear patterns of hedges and walls.
- Relics of rig and furrow, and cultivation terraces.
- Frequent hedgerow oak, ash, sycamore and wych elm, tree lined watercourses and overgrown hedgerows
- Ancient ash and oak woods in gorges and denes.
- Old villages of vernacular sandstone buildings on the dale floor.
- Scattered stone farmsteads and field barns.
- Limestone quarries are locally prominent on the dale side.
- Visually enclosed by woodlands, trees and hedgerows and defined by high moorland ridgelines.

### Description

Broad upland valleys with narrow flood plains or incised gorges on the valley floor. Alternating strata of Carboniferous limestones, sandstones and softer shales and mudstones give a gently stepped profile to the dale side in places, and outcrop occasionally in gorges and dale side quarries. On lower slopes they are masked by glacial boulder clays, or sands and gravels marked by undulating terrain. Fast flowing rivers course on rocky beds through steep sided gorges or meander across floodplains of river terrace gravels and alluvium. Soils are heavy, often waterlogged clays, with more fertile brown earths and alluvial soils on the dale floor.

The lower dales are pastoral landscapes with mosaics of improved and semi-improved pasture and occasional flower-rich hay meadows. Field systems are sub-regular or linear in pattern and have their origins in the enclosure of common town fields surrounding the dales villages that took place mostly in the 17<sup>th</sup> century. Relics

of ancient agriculture – rigg and furrow, lynchets and cultivation terraces – are widespread. Field boundaries are a mixture of hedgerows and stone walls. Walls are made of locally quarried stone or rounder boulders from river beds and field clearances. Hedgerows are often tall and overgrown and rich in trees, with frequent ash, oak, sycamore and wych elm. Regular parliamentary enclosures are found on more recently enclosed land on the higher dale sides.

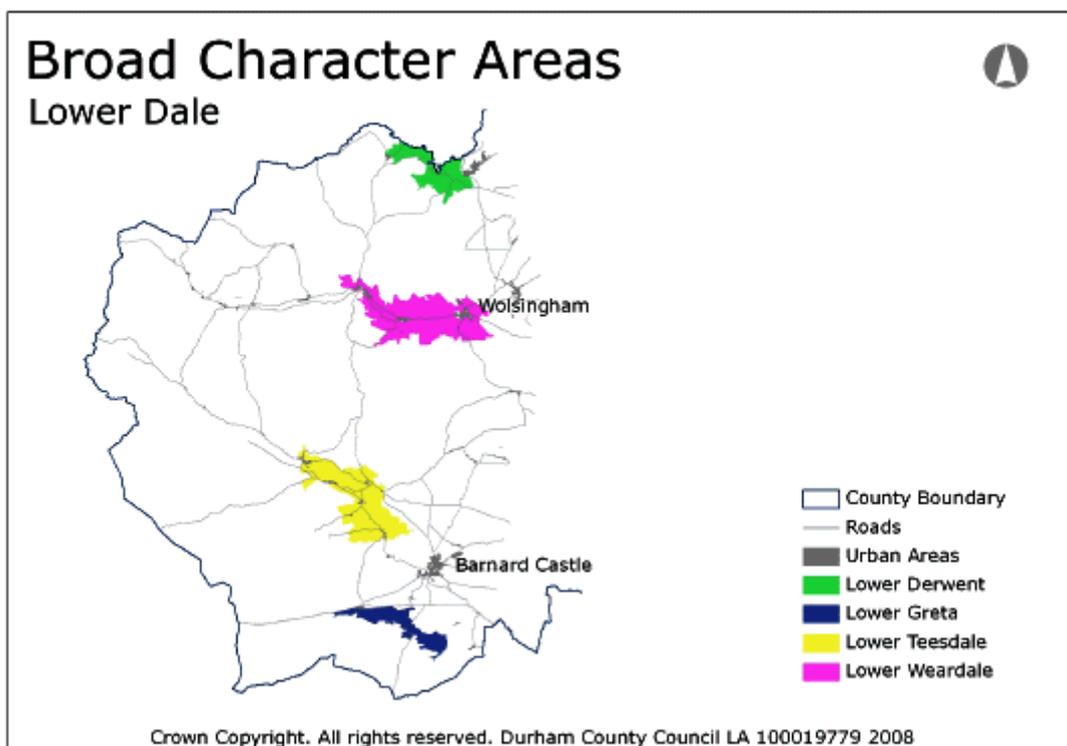
Ancient ash and oak woodlands are found along rivers and streams and in gills and gorges. Plantations of pine and larch are scattered across the dale side. Woodland cover is not high, but the frequency of small woodlands, hedgerow and field trees, tree-lined watercourses and overgrown hedgerows gives the landscape a well-wooded feel.

Small and medium sized villages lie on the valley floor connected by winding roads. Most villages are of medieval origins and some still retain a central village green. Others were enlarged in the C18th and C19th century with housing for workers in the quarrying, lead mining and steel working industries. Farms and field barns are scattered across the dale side or stung out along minor roads. Buildings are of local stone with roofs of stone flag or slate and have a strong vernacular character. Active and abandoned quarries are prominent on the dale side in places following outcrops of the Great Limestone.

The landscape is relatively broad in scale, defined by encircling moorland ridgelines, but locally it is visually enclosed by woodlands, trees and hedgerows giving it a more intimate scale. A settled and largely tranquil upland fringe landscape that, with its vernacular buildings, old villages and pastoral landuse, has a strong sense of both visual unity and cultural continuity.

### Broad Character Areas

The Lower Dale landscape type is represented by four Broad Character Areas.



**Lower Derwent.** The River Derwent lies in a deep, winding, gorge fed by tributaries in steep sided denes. The gorge and denes are heavily wooded, containing ancient oak and ash woodlands and conifer plantations. The surrounding valley sides are pastoral with improved or rushy pastures, irregular patterns of old hedges and walls

and frequent hedgerow and field trees. The valley is sparsely settled with scattered farms in its lower reaches. The village of Edmundbyers and the hamlet of Muggleswick lie on gentle valley slopes in the west

**Lower Weardale.** A broad and well-defined valley in which the River Wear meanders across a narrow floodplain flanked by narrow riparian woods and fed by small wooded gills. The landscape of the lower dale is pastoral with a mosaic of improved and semi-improved pastures, sub-regular patterns of old hedges and walls, and scattered hedgerow trees. The large villages at Wolsingham, Stanhope and Frosterley lie on the north bank of the river along the valley floor. There is a relatively dense pattern of farms, hamlets and farm clusters. The lower dale has been heavily affected by limestone quarrying with abandoned limestone quarries lining the dale between Frosterley and Stanhope. Parts of the dale are well wooded, with forestry plantations in and around old quarries and areas of former parkland.

**Lower Teesdale.** A broad dale with steep eastern slopes and gentle southern slopes divided by the valleys of Lunedale and Baldersdale. The River Tees meanders across a broad valley floor in the north before entering a deep wooded gorge in its lower reaches. The river and its tributaries are lined with woodlands or tree lines. The landscape is pastoral with improved and semi-improved pastures and meadows, sub regular patterns of old hedges and walls and abundant hedgerow trees. Old cultivation terraces and remnants of rig & furrow are common around the small villages found across the dale floor and the lower dale sides.

**Lower Greta.** A shallow dale running across the high plateau of the Stainmore Gap. The river Greta meanders across a narrow floodplain in the west before entering a narrow wooded gorge in the east. The wooded limestone scar of Kilmond Wood rises above the dale in the north. A pastoral landscape of improved and semi-improved pastures, sub regular patterns of old hedges and walls, with a linear grain in places, and scattered hedgerow trees. Farms and farm clusters are scattered along the dale.

## Local Landscape Types

Crags, scars and stone bands

Dale floor farmland: pasture and meadow

Dale floor farmland: walled pasture and meadow

Dale reservoir

Daleside farmland: pasture and meadow

Daleside farmland: walled pasture and meadow

Daleside farmland: wooded estate pasture

Daleside farmland: wooded pasture and meadow

Daleside farmland: wooded walled pasture and meadow

Disturbed land

Gill pastures

Infrastructure

Lakes & ponds

Low moor

Mineral working

Moorland edge

Moorland gill

Moorland plateau

Moorland plateau summit

Moorland reservoir

Moorland ridge

Moorland slope

Moorland summit

Outlying moor

Parkland

Parks and recreation grounds

River: upper reaches

Steep daleside bluff: pasture

Top land, allotments and intakes: open pasture

Top land, allotments and intakes: wooded pasture

Top land, allotments and intakes: open rough grazing

Top land, allotments and intakes: wooded rough grazing

Upland woods

Upland woods: forest

Upland woods: gills and gorges

Upland woods: juniper

Upland woods: riverside

Urban

## Crags, scars and stone bands

Crags, scars and stone bands are relatively uncommon in the eastern valleys of the North Pennines and vary in character with the underlying geology.

The Dolerites of the Whin Sill form steep scars that are generally grey in colour with a vertical columnar structure. In places they form tall singular crags (Cronkley Scar, Falcon Clints) with sparsely vegetated blocky scree slopes. Elsewhere the columnar structure of the dolerite gives a stepped profile to lower scars (Holwick Scars) which may be further dissected by hanging gills to give a more undulating sequence of buttresses and grassy gills or cols. These rocks also give rise to spectacular waterfalls which may be massive (High Force) or stepped and columnar (Cauldron Snout).

Carboniferous Sandstones and Limestones outcrop on steeper dale & moorland valley sides in low crags and rocky stone bands. These crags have a horizontally bedded structure, with prominent vertical jointing typical of the limestones. Grey or buff limestones may be found together with darker sandstones and occasionally dark grey shales. The softer sandstones and shales often weather and support vegetation.

## Subtypes

### Juniper woods

## Dale floor farmland: pasture and meadow

Pastoral farmland of the lower dale floor. The dale floor is relatively flat, its fertile brown earths and brown alluvial soils supporting improved and semi-improved pasture and meadow. Much of the meadow is improved and managed for silage but there are some traditionally managed flower-rich meadows. Field boundaries are a mixture of old, pre-enclosure, hedges and walls with frequent hedgerow trees (Ash, Oak, Sycamore). Field patterns are irregular or sub-regular, often following watercourses and river terraces and occasionally following the curved boundaries of medieval strip fields. Rivers and minor tributary streams from daleside gills meander across the dale floor, often marked by narrow riparian woodlands or tree lines (Alder). There are scattered relics of medieval rigg & furrow.

## Subtypes

### Modern field system

Areas of modern field rationalisation – usually bounded by wire fences.

### Old Enclosure.

The type

## Dale floor farmland: walled pasture and meadow

Pastoral farmland of the upper dale floor. The dale floor may be flat or gently undulating, its brown earths and stagnogley soils supporting improved and semi-improved pasture and meadow. Some meadow is improved and managed for silage but there are large areas of traditionally managed flower rich hay meadow. On wetter ground pastures are rushy. Field boundaries are predominantly dry stone walls dating from many different periods. Tree cover is generally low, though field boundary trees (Ash, Sycamore) are common in places and particularly in areas of older enclosure. Rivers and minor tributary streams from daleside gills run across the dale floor, often marked by narrow riparian woodlands or tree lines (Alder). Locally there may be relics of lead mining and processing.

## Subtypes

### **Modern field system**

Areas of modern field rationalisation – usually bounded by wire fences.

### **Old Enclosure.**

Areas of early, often piecemeal, enclosure. Older fields may be irregular or sub-regular, their alignments strongly influenced by watercourses, river terraces, roads and tracks. The oldest walls are often made from irregular river cobbles or field clearance stones. Field trees are locally common.

### **Surveyor Enclosed**

Areas of late, 18<sup>th</sup> or 19<sup>th</sup> century enclosure. Field patterns are regular grids of dry stone walls, usually of fairly thinly bedded quarried stone. Field trees are rare.

## **Dale Reservoir**

Water supply reservoirs in the middle and upper dale. Dale reservoirs are bordered by fringes of pasture or rough grassland, usually demarcated by a continuous boundary wall, or flanked by areas of coniferous forestry. Dams, spillways, pump houses and other buildings, usually built of stone in a formal 'estate' style, are often notable features. Bare draw down zones may be prominent when water levels are low.

## Subtypes

### **Reservoir.**

Reservoir water body.

### **Reservoir fringes.**

Areas of pasture, rough grazing or unmanaged grassland bordering dales reservoirs & containing dams, spillways and other infrastructure.

## **Daleside farmland: pasture and meadow**

Pastoral farmland of improved and semi-improved pasture and meadow on the slopes of the lower dale side. Most meadows are improved and cut for silage. Field boundaries are a mixture of old, pre-enclosure, hedges and walls, with locally abundant hedgerow trees (Ash, Oak, Sycamore). Field patterns are generally sub-regular, sometimes following the curved boundaries of medieval strip fields. Hedges are often overgrown and unmanaged, in places reduced to lines of bushes and trees grazed through by livestock. Areas of rigg & furrow, strip lynchets and other cultivation features survive from earlier periods of cultivation on land around villages and older farms.

## Subtypes

### **Old Enclosure.**

The type

### **Surveyor Enclosed**

Areas of late, 18<sup>th</sup> or 19<sup>th</sup> century enclosure. Field patterns are regular grids of dry stone walls, usually of fairly thinly bedded quarried stone. Field trees are rare.

### **Daleside farmland: walled pasture and meadow**

Pastoral farmland of the upper dale side. Heavy and often poorly drained soils support improved and semi-improved pastures and meadows. Wetter pastures are often rushy. Some meadows are cut for silage; others are managed as traditional meadow. Field boundaries are predominantly dry stone walls dating from many different periods. Small stone field barns are fairly common. Tree cover is sparse, with isolated stands of shelter trees (Ash, Sycamore) around daleside farms, occasional field trees and tree lined watercourses (Alder, Sallow). Relics of lead mining and processing are locally common.

#### **Subtypes**

##### **Old Enclosure.**

Areas of early, often piecemeal, enclosure. Older fields may be irregular or sub-regular, their alignments often influenced by the local topography. The oldest walls are often made from field clearance stones..

##### **Surveyor Enclosed**

Areas of late, 18<sup>th</sup> or 19<sup>th</sup> century enclosure. Field patterns are regular grids of dry stone walls, usually of fairly thinly bedded quarried stone, and often ignoring the underlying topography.

### **Daleside farmland: wooded estate pasture**

Wooded pastoral estate farmland. Heavy and often poorly drained soils support improved and semi-improved pastures. The overall landscape is deliberately designed with large coniferous or mixed plantations and smaller copses and coverts, often in geometrical shapes. Field boundaries are dry stone walls and fences on higher ground, giving way to hedges on the lower daleside.

#### **Subtypes**

##### **Surveyor Enclosed**

The type

### **Daleside farmland: wooded pasture and meadow**

Wooded pastoral farmland of the lower dale side. Woodlands are a mixture of ancient Sessile Oak and Ash woods in gorges and ravines and on steep daleside slopes, and plantations of softwoods (Scots Pine, Larch) or hardwoods (Beech, Sycamore). The farmland between is a mixture of improved and semi-improved pasture and meadow, with most meadows being improved and cut for silage. Field boundaries are a mixture of old, pre-enclosure, hedges and walls, with locally abundant hedgerow trees (Ash, Oak, Sycamore). Field patterns are generally sub-regular, sometimes following the curved boundaries of medieval strip fields. Hedges are often overgrown and unmanaged, in places reduced to lines of bushes and trees grazed through by livestock. Areas of rigg & furrow, strip lynchets and other cultivation features survive from earlier periods of cultivation and particularly on land around villages and older farms.

#### **Subtypes**

##### **Old Enclosure.**

The type

##### **Surveyor Enclosed**

Areas of late, 18<sup>th</sup> or 19<sup>th</sup> century enclosure. Field patterns are regular grids of dry stone walls, usually of fairly

thinly bedded quarried stone. Field trees are rare.

### **Daleside farmland: wooded walled pasture and meadow**

Wooded pastoral farmland of the upper dale side and tributary dales. Woodlands are predominantly plantations of softwoods (Scots Pine, Larch and Spruce) with occasional ancient Sessile Oak and Ash woods in ravines and gills. Heavy and often poorly drained soils support improved and semi-improved pastures and meadows. Wetter pastures are often rushy. Some meadows are cut for silage; others are managed as traditional meadow. Field boundaries are predominantly dry stone walls dating from different periods of enclosure. Outside of the woodlands tree cover is sparse, with isolated stands of shelter trees (Ash, Sycamore) around farmsteads, occasional field trees and tree lined watercourses (Alder, Sallow).

#### **Subtypes**

##### **Old Enclosure.**

Areas of early, often piecemeal, enclosure. Older fields may be irregular or sub-regular, their alignments often influenced by the local topography. The oldest walls are often made from field clearance stones..

##### **Surveyor Enclosed**

Areas of late, 18<sup>th</sup> or 19<sup>th</sup> century enclosure. Field patterns are regular grids of dry stone walls, usually of fairly thinly bedded quarried stone, and often ignoring the underlying topography.

### **Disturbed land**

A variable type made up largely of abandoned mineral workings and railway lines.

#### **Subtypes**

##### **Old Carboniferous Limestone quarry.**

Abandoned limestone quarry. Typical elements include extraction faces, spoil mounds and haul roads, softened by varying degrees of natural regeneration. Some quarries contain small ponds or larger areas of standing water. Quarry faces are made up of grey, horizontally bedded and vertically jointed Carboniferous Limestones, inter-bedded with harder sandstones and softer shales, and often capped by a crest of clay drift. The base rich limestone wastes and more acidic overburden materials give rise to a varied flora including both calcareous and acidic grasslands, scrub and secondary woodland.

##### **Old ironstone quarry.**

Abandoned Ironstone workings. Opencast pits worked for ironstone rarely have significant extraction faces but occur as areas of disturbed ground with prominent, often fan shaped, spoil heaps supporting acid grassland, usually grazed by stock.

##### **Old lead/spa workings**

Abandoned quarries ranging from small quarries worked for building stone and agricultural lime to larger and more recently abandoned quarries worked for aggregates. Typical elements include extraction faces, spoil mounds and haul roads, softened by varying degrees of natural regeneration. Some quarries contain small ponds or larger areas of standing water. Some structures may survive – particularly lime kilns associated with older limestone quarries.

##### **Old railway**

Abandoned railway lines survive as narrow linear features running through other landscapes. Most are made up

of alternating cuttings and embankments. Many structures survive along their routes including bridges and viaducts, culverts, tippers and station platforms. Some associated buildings like station houses and railway cottages have been converted to other uses. Most abandoned lines have been colonised by vegetation and support a diverse grassland and woodland flora which reflects the range of naturally occurring or imported materials found in cuttings and embankments. Pioneer or ruderal species are particularly characteristic. Many old railway lines have been developed as recreational multi-user routes.

#### **Old sandstone quarry.**

Abandoned sandstone quarry. Typical elements include extraction faces, spoil mounds and haul roads, softened by varying degrees of natural regeneration. Some quarries contain small ponds or larger areas of standing water. Quarry faces are horizontally bedded Carboniferous Sandstone varying in colour from buff to grey. Base-poor sandstone wastes and overburdens often support an acid-loving flora and are typically colonised by pioneer tree and shrub species like birch, alder, goat willow, hawthorn, gorse, broom and dog rose.

#### **Old Whinstone quarry.**

Abandoned whinstone quarry. Typical elements include extraction faces, spoil mounds and haul roads, softened by varying degrees of natural regeneration. Some quarries contain small ponds or larger areas of standing water. Quarry faces are made up of charcoal grey dolerite with prominent vertical columnar jointing. The mixture of base rich and base poor wastes and overburden materials gives rise to a varied flora including both calcareous and acidic grasslands, with scrub and secondary woodland developing in areas that are not grazed.

### **Gill pastures**

Incised valleys varying from shallow daleside gills to deeper ravines. Land use is predominantly poor quality pasture or rough grazing, often with areas of bracken or scrub, and sometimes merging into open wood pasture. Field patterns vary considerably: some gills aren't fenced from surrounding pastures, others are demarcated by hedges or walls, while others are crossed arbitrarily by parliamentary enclosure boundaries. The gills contain small, fast flowing and rocky becks or burns, usually unfenced from the surrounding land. The larger ravines contain rivers (see River: upper reaches). Relics of lead mining and processing, or quarrying, and industrial or agricultural water mills are common.

### **Subtypes**

#### **Surveyor enclosed.**

Enclosures of 18<sup>th</sup> or 19<sup>th</sup> century origins. Field patterns are regular grids of dry stone walls, usually of fairly thinly bedded quarried stone, often ignoring the underlying topography.

#### **Old enclosure.**

Areas of early, often piecemeal, enclosure. Older fields may be irregular or sub-regular, often following the topography. The oldest walls are often made from field clearance stones.

### **Infrastructure**

A variable local type covering a range of different forms of infrastructure.

### **Subtypes**

#### **Highway**

Only major roads are mapped and only where the scale of development is significant. The Highway subtype

therefore covers larger scale cuttings, embankments and interchanges.

### **Military**

A variable type consisting of military installations such as active, dormant or abandoned ordnance dumps and firing ranges.

### **Railway**

Only major railways are mapped and only where the scale of development is significant. The Railway subtype therefore predominantly covers larger scale cuttings, embankments and sidings.

### **Water treatment works**

Sewerage or water treatment works. Only features in rural or urban fringe situations are mapped; others are subsumed within the Developed: urban type. Treatment works are typically made up of large concrete reservoirs, water tanks, filtration beds, lagoons, and ancillary buildings. Most are surrounded by security fences.

## **Lakes and ponds**

A variable type covering a range of natural and man made water bodies.

### **Subtypes**

#### **Flooded quarry.**

Flooded limestone or sandstone quarry. Water bodies are typically deep and clear, and edged by vertical cliffs falling sheer into the water. Waters are usually nutrient poor with little emergent vegetation. Smaller features within larger quarries are not mapped separately from the Disturbed Land: Quarry subtypes. They are usually similar in character to this subtype though often with shallower waters with more emergent vegetation.

#### **Upland lakes and tarns**

A single example is mapped (Fish Lake) which may be based on a natural pond augmented by silt dams caused by up-stream lead hushing or by an artificially constructed dam. The water body is irregular in shape and fringed by flats of tailings from a nearby barytes mine.

## **Low moor**

Low lying areas of moorland on the dale floor or lower dale side, bordering onto, or surrounded by, enclosed intake pastures. Low moors have many of the characteristics of nearby moorland types but lack their scale.

### **Subtypes**

#### **Grass moor**

Vegetation dominated by acid grassland.

#### **Grass moor (enclosed)**

Vegetation dominated by acid grassland. The moor is enclosed or subdivided by walls or fences.

#### **Heather moor**

Vegetation dominated by shrub-heath.

#### **Heather moor (enclosed)**

Vegetation dominated by shrub-heath. The moor is enclosed or subdivided by walls or fences.

## **Mineral working**

A diverse type made up of active or dormant mineral workings ranging from hard-rock quarries to opencast coal sites, gravel pits and clay workings. Typical common elements include extraction voids and faces, soil mounds, overburden and waste heaps, haul roads, buildings and processing plant.

### **Subtypes**

#### **Carboniferous limestone quarry**

Large quarries worked primarily for road stone products. Quarry faces are made up of grey, horizontally bedded and vertically jointed Carboniferous Limestones, inter-bedded with harder sandstones and softer shales, and often capped by a crest of clay drift. Crushing, screening and coating plant occupy parts of the quarry floor. The base rich limestone wastes and acidic overburden materials give rise to a varied flora including both calcareous and acidic grasslands, and scrub and secondary woodland which may colonise undisturbed areas.

#### **Sandstone Quarry**

Small or medium-sized quarries worked primarily for building stone. Quarry faces are horizontally bedded Carboniferous Sandstone varying in colour from buff to grey. Industrial buildings for stone cutting and processing may occupy parts of the quarry floor, or be absent in the case of smaller 'snatch' quarries. Base-poor sandstone wastes and overburdens often support an acid-loving flora which may colonise undisturbed areas.

#### **Whinstone quarry**

Medium-sized quarries worked primarily for road stone products. Quarry faces are made up of charcoal grey dolerite with prominent vertical columnar jointing. Crushing and screening plant take up part of the quarry floor. The mixture of base rich and base poor wastes and overburden materials can give rise to a varied flora including both calcareous and acidic grasslands, but this is generally slow to colonise bare areas.

## **Moorland edge**

Steeply sloping moorland edges falling to enclosed moorland-fringe pastures or lower lying moors. Slopes may be singular or dissected by small gills.

### **Subtype**

#### **Grass moor**

Vegetation dominated by acid grassland.

#### **Heather moor.**

Vegetation dominated by shrub-heath.

## **Moorland gill**

Incised valleys varying from shallow gills and gullies to deeper ravines are a feature of both the broader moorland valleys and the moorland plateau. Vegetation may be similar to the surrounding moorland, but often in the absence of peat on the steeper slopes of the gills it is dominated by acid grassland, or bracken. The steepest slopes may be bare of vegetation where deep peats, soft shales or glacial clays are eroded. The moorland gills contain small, fast flowing, rocky and peat-stained becks or burns, with occasional bankside sallows or rowan where grazing pressure is light.

### **Subtype**

**Bracken moor.**

Vegetation dominated by Bracken, or mosaic of bracken and acid grassland.

**Grass moor.**

Vegetation dominated by acid grassland.

**Heather moor.**

Vegetation dominated by shrub-heath, or mosaic of heath and acid grassland

**Hush.**

Lead mining hushes of similar scale and character to natural gills.

**Moorland plateau**

Flat or gently rolling moorland predominantly of blanket bog, grading to heather or grass moorland on thinner peats in the drier moorland edges. Man made features are rare and restricted to scattered fields, sheepfolds and grouse butts with the occasional wire fence or dry stone wall in the moorland edges.

**Subtypes**

**Blanket Bog.**

Blanket bog on deep peat.

**Blanket Bog (enclosed)**

Blanket bog on deep peat. The moor is subdivided by fences.

**Grass moor.**

Vegetation dominated by acid grassland.

**Grass moor (enclosed).**

Vegetation dominated by acid grassland. The moor is enclosed or subdivided by walls or fences

**Heather moor.**

Vegetation dominated by shrub-heath, or mosaic of heath and acid grassland.

**Heather moor (enclosed).**

Vegetation dominated by shrub-heath, or mosaic of heath and acid grassland. The moor is enclosed or subdivided by walls or fences

**Moorland plateau summit**

Low, well-defined flat-topped summits (Shacklesborough, Goldsborough) standing around 15 to 20 meters above the surrounding moorland plateau. The edges of the summits are defined by low Crags of hard Millstone Grit sandstones and scree or clitter slopes of large boulders.

**Subtypes**

**Grass moor.**

Vegetation dominated by acid grassland. The type.

## **Moorland reservoir**

Water supply reservoirs in the high moorland ridges. Moorland reservoirs are generally unfenced from the surrounding moorland with fairly minimal infrastructure. Bare draw down zones may be prominent when water levels are low.

### **Subtypes**

#### **Reservoir.**

Reservoir water body.

#### **Reservoir fringes.**

Areas of enclosed moorland bordering moorland reservoirs & containing dams, spillways and other infrastructure.

## **Moorland ridge**

High, gently sloping or flat-topped ridges covered predominantly in blanket bog, but grading to heather or grass moorland on thinner peats in the east. Man made features are rare and restricted to scattered cairns, curricks and grouse butts. The ridges are crossed in places by unfenced roads marked by lines of snow poles.

### **Subtypes**

#### **Blanket Bog.**

Blanket bog on deep peat.

#### **Grass moor.**

Vegetation dominated by acid grassland.

#### **Grass moor (enclosed).**

Vegetation dominated by acid grassland. The moor is enclosed or subdivided by walls or fences

#### **Heather moor.**

Vegetation dominated by shrub-heath, or mosaic of heath and acid grassland.

#### **Heather moor (enclosed).**

Vegetation dominated by shrub-heath, or mosaic of heath and acid grassland. The moor is enclosed or subdivided by walls or fences

## **Moorland slope**

Moderate slopes of heather or grass moorland falling from the higher ridges and summits to the enclosed land of the dales. The slopes may have a stepped profile reflecting alternating sequences of harder and softer sandstones, shales and limestones. Man made features are rare and restricted to scattered grouse butts and occasional lead mining remains. The slopes are crossed in places by unfenced roads marked by lines of snow poles.

### **Subtypes**

#### **Blanket Bog.**

Blanket bog on deep peat.

**Grass moor.**

Vegetation dominated by acid grassland.

**Grass moor (enclosed).**

Vegetation dominated by acid grassland. The moor is enclosed or subdivided by walls or fences

**Heather moor.**

Vegetation dominated by shrub-heath, or mosaic of heath and acid grassland.

**Heather moor (enclosed).**

Vegetation dominated by shrub-heath, or mosaic of heath and acid grassland. The moor is enclosed or subdivided by walls or fences

**Moorland summits**

High, flat-topped summits of acid grassland and blanket bog, ringed by grey stone bands and clutter slopes, littered with rocks and boulders, and pockmarked with shake-holes. Man made features are very rare and restricted to scattered piles of stone and the occasional sheepfold.

**Subtypes**

**Grass moor.**

Vegetation dominated by acid grassland. The type.

**Moorland valley**

Moderately sloping valleys of heather or grass moorland cutting back into the higher moorland ridges. The valley sides may have a stepped profile reflecting alternating sequences of harder and softer sandstones, shales and limestones. Valley floors are often incised, steep-sided gills. Man made features are rare and restricted to scattered sheepfolds, biolds and grouse butts, together with occasional lead mining remains. The valleys are crossed in places by unfenced roads marked by lines of snow poles.

**Subtypes**

**Blanket Bog.**

Blanket bog on deep peat.

**Grass moor.**

Vegetation dominated by acid grassland.

**Grass moor (enclosed).**

Vegetation dominated by acid grassland. The moor is enclosed or subdivided by walls or fences

**Heather moor.**

Vegetation dominated by shrub-heath, or mosaic of heath and acid grassland.

**Heather moor (enclosed).**

Vegetation dominated by shrub-heath, or mosaic of heath and acid grassland. The moor is enclosed or subdivided by walls or fences

## **Outlying moor**

Small areas of heather moorland on low ridges fringing the higher ridges and summits and the plateau, surrounded by enclosed intake pastures. The outlying moors have many of the characteristics of the nearby moorland types but lack their scale.

### **Subtypes**

#### **Heather moor.**

Vegetation dominated by shrub-heath, or mosaic of heath and acid grassland.

#### **Heather moor (enclosed).**

Vegetation dominated by shrub-heath, or mosaic of heath and acid grassland. The moor is enclosed or subdivided by walls or fences

## **Parkland**

The designed landscapes of ornamental parks typically include formal gardens together with larger areas of open pastoral parkland. Veteran native and exotic trees are scattered across the park or arranged in formal avenues. Clumps of trees, copses and larger woodlands are deployed for their aesthetic effect. Other ornamental features – lakes, ponds, cascades and follies may be present. Buildings – gatehouses, lodges and farms – are typically designed in a formal style to compliment the main house. The park may be visually open, often with boundary ha-has to maintain an open character, or enclosed by boundary fences or hedges and particularly in areas away from the parkland core. The park as a whole is often bounded by a high mortared stone wall.

### **Subtypes**

#### **Enclosed parkland pasture.**

Enclosed ornamental farmland currently under pasture. Field systems may date from earlier enclosures or may be contemporary with the layout of the park. The parkland character often survives largely in the woodland pattern although field or avenue trees may also be present.

#### **Open parkland pasture.**

Open pastoral parkland. grasslands may be improved or semi-improved and often contain relics of the medieval landscape including rig and furrow and building platforms. Veteran parkland trees – both native and exotic - are scattered across the parkland, sometimes in great numbers. Other parkland relics – avenues, ornamental water bodies, small copses, ha-has etc may be present.

#### **Ornamental gardens.**

Ornamental gardens are very diverse but often include walled vegetable gardens, bordered walks and formal parterres.

## **Parks & recreation grounds**

A varied type incorporating a large range of recreational landscapes.

### **Subtypes**

#### **Caravan sites.**

Permanent caravan sites, sometimes with touring pitches. Often located within areas of woodland. Most contain

a permanent infrastructure of roadways and service buildings.

#### **Churchyards, cemeteries & crematoria.**

The designed amenity landscapes of churchyards, cemeteries and crematoria.

#### **Country parks.**

Formal recreational facilities in the countryside usually with areas of amenity grassland, car parks and other facilities.

#### **Playing fields & urban green space.**

Open spaces of amenity grassland including sports pitches and areas of informal public open space.

### **River: upper reaches**

Fast flowing upland rivers meandering across narrow floodplains or contained within narrow gorges. The river may be fenced-off from surrounding pastures or left unfenced and may be lined with trees or narrow **Riverside woods**.

#### **Subtypes**

##### **River.**

Rocky, fast flowing watercourses with alternating pools and riffles, often with multiple channels braiding between exposed shingle banks and islands.

##### **River bank.**

River banks that are fenced, walled or hedged from surrounding land, supporting rough unmanaged grassland and, in places, sporadic trees of species such as Alder, Birch, Ash, Purple Willow and Grey Willow.

### **Steep daleside bluff: pasture**

Steeply sloping bluffs following the outcrop of harder sandstone or limestone beds in the daleside. As they are difficult to manage or improve agriculturally these bluffs often support semi-improved pasture or rough grazing, sometimes invaded by bracken or hawthorn scrub. They are typically defined by a wall at the break in slope at the top and foot of the slope, and occasionally subdivided in a piecemeal fashion by later boundaries. Often associated with spring lines and small quarries.

#### **Subtypes**

##### **Old enclosure.**

The type.

### **Top land, allotments and intakes: open pasture.**

Open pasture and wet rush pasture in the moorland fringes. Fields are typically medium or large in scale and bounded by dry stone walls or wire fences. Most are regular in pattern, originating in 18<sup>th</sup> or 19<sup>th</sup> Century intakes from the moor. Tree cover is low and restricted to the occasional roadside or streamside rowan or sallow, wind-sculpted sycamore shelter trees around farmsteads, and isolated conifer shelterbelts. This type is transitional with Top land, allotments & intakes: open rough grazing from which it is distinguished only by the degree of improvement in the sward.

#### **Subtypes**

#### **Old Enclosure.**

Early intakes from the moor. Field patterns are often irregular and influenced by the local topography. Boundary walls may be made from irregular field clearance stones, or rebuilt in later periods using quarried stone.

#### **Surveyor Enclosed.**

Field patterns are regular grids of dry stone walls – usually built from thinly bedded quarried stone - or wire fences.

### **Top land, allotments and intakes: wooded pasture.**

Open pasture and wet rush pasture in the moorland fringes. Fields are typically medium or large in scale and bounded by dry stone walls or wire fences. Most are regular in pattern, originating in 18<sup>th</sup> or 19<sup>th</sup> Century intakes from the moor. There are frequent blocky conifer plantations and shelterbelts but otherwise tree cover is low and restricted to the occasional roadside or streamside rowan or willow and wind-sculpted sycamore shelter trees around isolated farmsteads. This type is transitional with Top land, allotments & intakes: wooded rough grazing from which it is distinguished only by the degree of improvement in the sward.

#### **Subtypes**

##### **Old Enclosure.**

Early intakes from the moor. Field patterns are often irregular and influenced by the local topography. Boundary walls may be made from irregular field clearance stones, or rebuilt in later periods using quarried stone.

##### **Surveyor Enclosed.**

Field patterns are regular grids of dry stone walls – usually built from thinly bedded quarried stone - or wire fences.

### **Top land, allotments and intakes: open rough grazing.**

Enclosed moorland, rough grazing and wet rush pastures in the moorland fringes. Fields are typically large and bounded by dry stone walls or wire fences. Most are regular in pattern, originating in 18<sup>th</sup> or 19<sup>th</sup> Century intakes from the moor. Tree cover is low and restricted to the occasional roadside or streamside rowan or willow, wind sculpted sycamore shelter trees around farmsteads, and isolated conifer shelterbelts. This type is intermediate between Top land, allotments & intakes: open pasture and the moorland subtype Grass moor (enclosed) - from which it is distinguished by the degree of improvement in the sward.

#### **Subtypes**

##### **Old Enclosure.**

Early intakes from the moor. Field patterns are often irregular and influenced by the local topography. Boundary walls may be made from irregular field clearance stones, or rebuilt in later periods using quarried stone.

##### **Surveyor Enclosed.**

Field patterns are regular grids of dry stone walls – usually built from thinly bedded quarried stone - or wire fences.

### **Top land, allotments and intakes: wooded rough grazing.**

Enclosed moorland, rough grazing and wet rushy pastures in the moorland fringes. Large regular fields - late

C18th or C19th intakes from the moor - are bounded by low dry stone walls or wire fences. There are frequent blocky conifer plantations and shelterbelts but otherwise tree cover is low and restricted to the occasional roadside or streamside rowan or willow and wind sculpted sycamore shelter trees around isolated farmsteads. This type is intermediate between Top land, allotments & intakes: wooded pasture and the moorland subtype Grass moor (enclosed) - from which it is distinguished by the degree of improvement in the sward.

## Subtypes

### **Old Enclosure.**

Early intakes from the moor. Field patterns are often irregular and influenced by the local topography. Boundary walls may be made from irregular field clearance stones, or rebuilt in later periods using quarried stone.

### **Surveyor Enclosed.**

The type. Field patterns are regular grids of dry stone walls or wire fences, usually ignoring the underlying topography.

## Upland woods

A variable type covering many of the diverse woodlands of the upland dales and upland fringes.

## Subtypes

### **Ancient woods.**

Ancient semi-natural woodlands. The base-poor glacial drift of the dales and the drift-free carboniferous sandstones and shales of the upland fringes and moorland fringes support Oak (NVC W11) and Oak-birch (NVCW17) woodlands. Ash woodland communities (NVC W9) occur on limestone outcrops and Alder-Ash (NVC W7) on flushed slopes.

### **Modified ancient woods.**

This subtype includes re-planted ancient woodland sites and ancient woods that have been heavily modified by the introduction of commercial or exotic species, or species not native to the locality.

### **Old wood pasture.**

Ancient woodlands grazed as wood pasture, usually taking the form of a mosaic of open woodland, scrub and grassland containing ancient and veteran trees. Canopy species usually reflect those of the native woodland type although their ground flora is likely to have been heavily modified by grazing. Many woodlands in the uplands are intermittently grazed or stocked in the winter. The distinction between the two here is made on the basis of the canopy structure, with only very open woodlands that are regularly grazed being defined as Old wood pasture.

### **Plantation.**

Planted woodlands of very variable character, including small plantations of species like Scot's Pine, Larch, Beech and Sycamore, often planted for shelter, and larger plantations usually dominated by conifers such as Scots Pine, Larch, Norway Spruce and Sitka Spruce.

### **Secondary woods and wood pasture.**

Secondary semi-natural woodlands dominated by pioneer species. Birch is often dominant in woodlands colonising unmanaged heath. A broader range of species (Birch, Ash, Sycamore, Hawthorn, Sallows, Gorse)

occurs in woodlands on disturbed land such as old quarries, lead workings and railway embankments.

## **Upland woods: forest**

Large scale Forestry Commission plantations (Hamsterley Forest, The Stang) in the moorland fringes. Relatively uniform tracts of conifers with regular grids of rides and tracks. Sitka Spruce is the dominant species, with areas of Scots Pine, Larch and other softwoods.

### **Subtypes**

#### **Modified ancient woods.**

Replanted ancient woodland sites and ancient woods heavily modified by the introduction of commercial or exotic species, or species not native to the locality.

#### **Plantation.**

The type.

## **Upland woods: gills and gorges**

Incised wooded valleys varying from shallow daleside gills to deeper gorges and ravines. On the generally thinly bedded carboniferous rocks of the dales the valleys typically cut down through a succession of different rocks, creating varied ground conditions and supporting a range of native woodland types. Ancient woodlands survive in some valleys, elsewhere they have been replanted with commercial species. The gills contain small, fast flowing and rocky becks or burns and the larger ravines contain rivers (see [River: upper reaches](#)). Relics of lead mining and processing, or quarrying, and industrial or agricultural water mills are locally common.

### **Subtypes**

#### **Ancient woods & wood pastures.**

Ancient semi-natural woodlands. Woodland communities include Upland Oak-birch woods (NVC W17) on acidic soils and Upland Oak woods (NVC W11) on better soils, with Upland Ash woods (NVC W9) on limestone outcrops and base rich soils, and Alder-ash (NVC W7) woods on flushed slopes and valley floors. Some woods are grazed as wood pasture. Some show signs of having been managed as coppice in the past.

#### **Modified ancient woods.**

Replanted ancient woodland sites and ancient woods heavily modified by the introduction of commercial or exotic species, or species not native to the locality.

#### **Old wood pasture.**

Ancient woodlands grazed as wood pasture, usually taking the form of a mosaic of open woodland, scrub and grassland containing ancient and veteran trees. Canopy species usually reflect those of the native woodland type although their ground flora is likely to have been heavily modified by grazing. Many woodlands in the uplands are intermittently grazed or stocked in the winter. The distinction between the two here is made on the basis of the canopy structure, with only very open woodlands that are regularly grazed being defined as Old wood pasture.

#### **Plantation.**

Typically softwood plantations of Larch, Scots Pine or other softwood species, often with Beech or Sycamore.

#### **Secondary woods & wood pastures.**

Secondary semi-natural woodlands largely of Birch and Oak-birch (NVCW17/W11) communities that have colonised areas of unmanaged pasture or moorland. Some woods are grazed as wood pasture, or are regenerating under light or intermittent grazing.

### **Upland woods: juniper**

Open low woodland or scrub dominated by Juniper, often in a mosaic with other moorland vegetation. Generally a fragmented habitat but occurring at a landscape scale in Upper Teesdale on low moorland slopes and whinstone crags falling to the River Tees.

### **Upland woods: riverside**

Narrow corridors of woodland on river banks and river terraces, usually semi-natural in character and made up of native species, particularly Alder, Ash, Oak, Birch and willow. Some are ancient woods, but most have been modified in some degree by grazing or by the dynamic conditions and shifting course of the upland river. Riverside woods are sometimes defined away from the river by a stone wall, or a hedge, but are occasionally grazed through to the water's edge. Relics of water mills or lead processing may occasionally be found.

### **Subtypes**

#### **Ancient woods & wood pastures.**

Ancient semi-natural woodlands. Typical woodland communities are Upland Oak woodland (NVC W11) on acidic soils and Upland Ash woodland (NVC W9) on limestone outcrops and base rich soils with Alder-ash (NVC W7) woodland particularly common.

#### **Plantation.**

Typically softwood plantations of Larch, Scots Pine or other softwood species, often with Beech or Sycamore.

#### **Secondary woods & wood pastures.**

Secondary semi-natural woodlands often of similar species to ancient woods, but which have naturally colonised the shifting upland river bank.

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## **Urban**

A variable type which covers a broad range of urban development - housing, industry, retail and commerce, community facilities and public open space. The landscape character assessment does not identify variations in character within the urban landscape at any level of detail but does identify a small number of basic subtypes.

### **Subtypes**

#### **Industrial land**

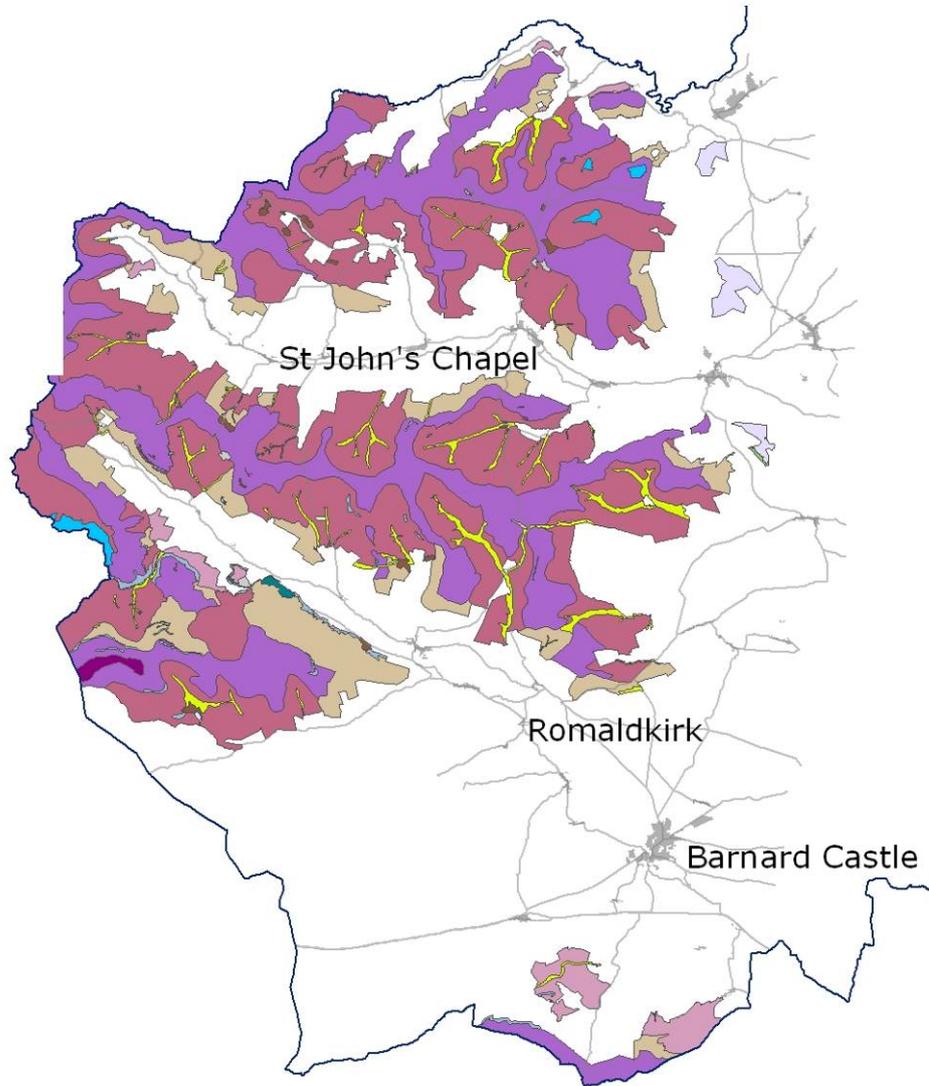
Land in industrial use. A variable type but generally containing large industrial buildings and areas of operational land. Smaller areas of land in industrial or commercial use are generally subsumed within the Urban subtype.

#### **Urban**

The type. Urban land including built development, gardens and public open spaces together with areas of recreational land (unless separately identified as Parks & recreation grounds local landscape type) and industrial/ commercial land (unless separately identified as Industrial land or Industrial and retail estates subtype).

# Local Landscape Types

## Moorland Ridges & Summits

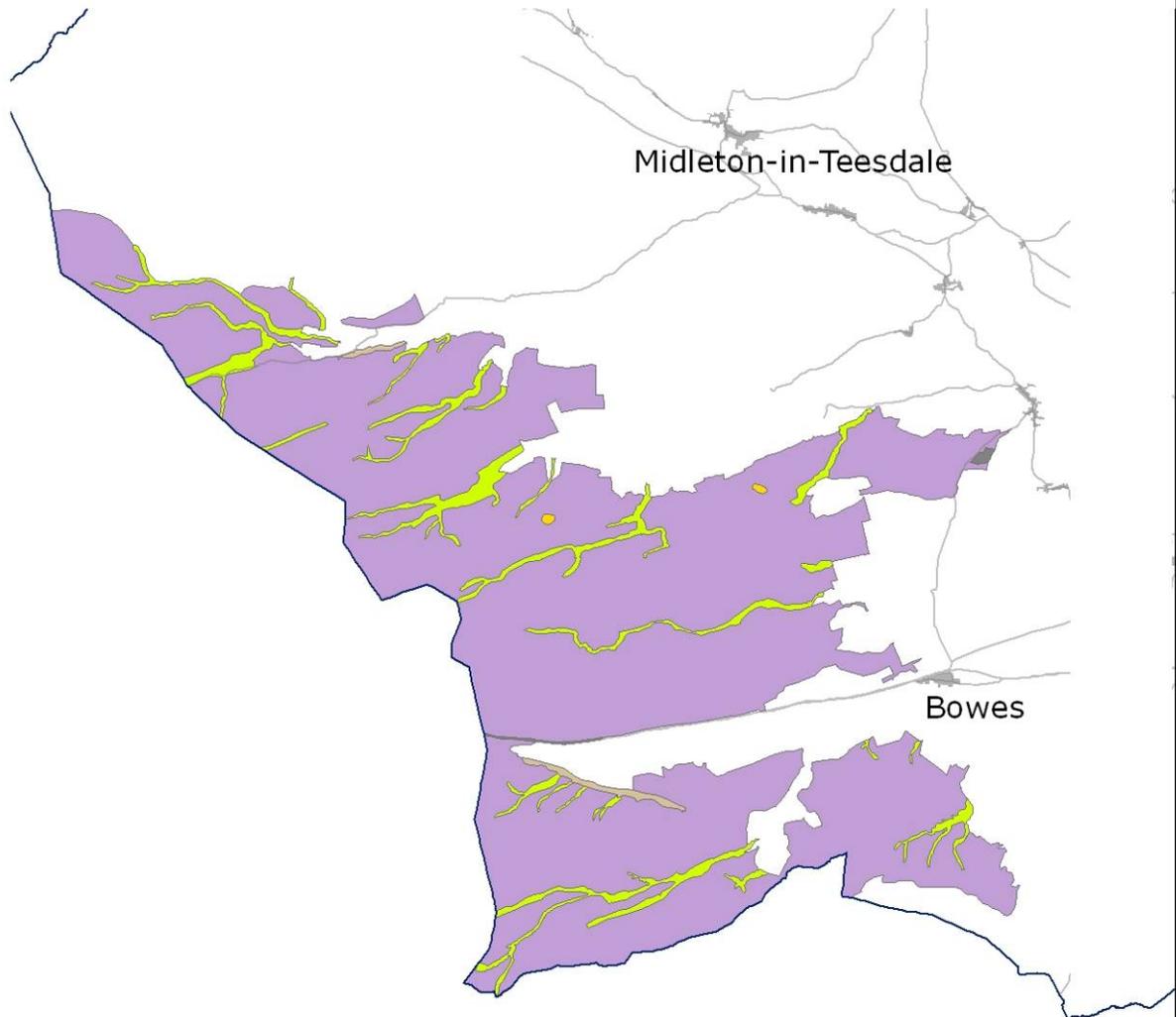


- |                             |  |
|-----------------------------|--|
| County Boundary             | Moorland ridge                               |
| Roads                       | Moorland slope                               |
| Settlements                 | Moorland summit                              |
| Disturbed land              | Moorland valley                              |
| Mineral working             | Outlying moor                                |
| Craggs, scars & stone bands | River: upper reaches                         |
| Lakes & ponds               | Top land, allotments & intakes: open pasture |
| Low moor                    | Upland woods                                 |
| Moorland gill               | Upland woods: gills & gorges                 |
| Moorland reservoir          | Upland woods: juniper                        |

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# Local Landscape Types

## Moorland Plateau

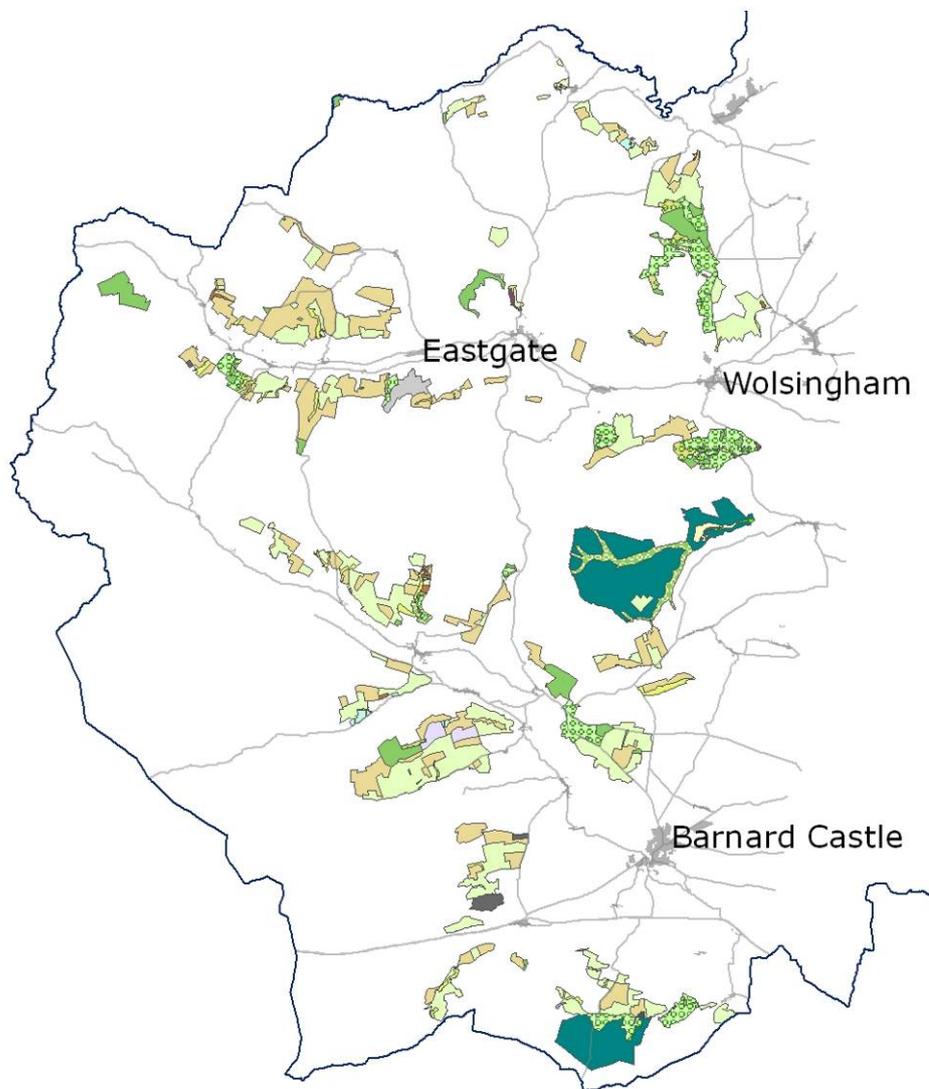


- |                 |                         |
|-----------------|-------------------------|
| County Boundary | Moorland edge           |
| Roads           | Moorland gill           |
| Settlements     | Moorland plateau        |
| Infrastructure  | Moorland plateau summit |

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# Local Landscape Types

## Moorland Fringe

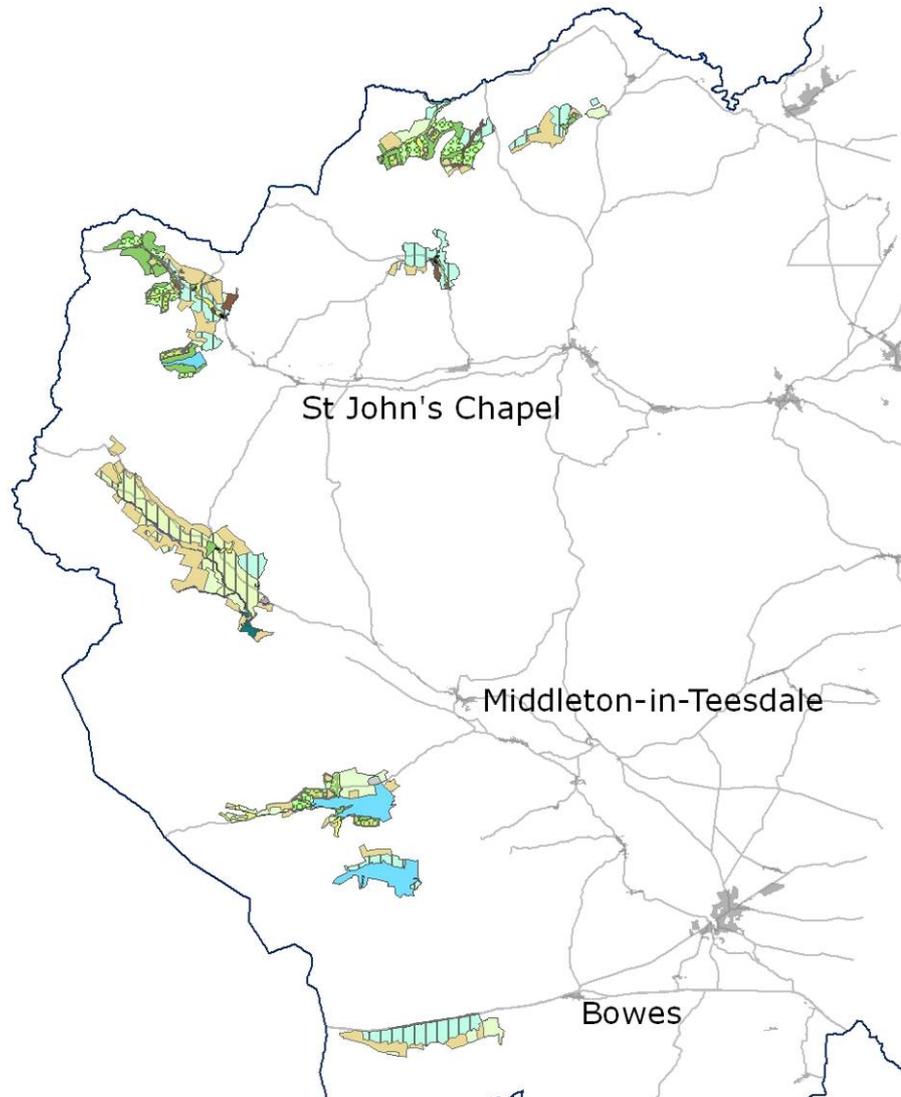


- |  |  |
|--|--|
| County Boundary                            | Low moor   |
| Roads                                      | Outlying moor  |
| Settlements                                | Parks & recreation grounds                           |
| Infrastructure                             | Steep daleside bluff: pasture                        |
| Disturbed land                             | Top land allotments & intakes: wooded pasture        |
| Mineral working                            | Top land, allotments & intakes: open pasture         |
| Craggs, scars & stone bands                | Top land, allotments & intakes: open rough grazing   |
| Dale floor farmland: pasture & meadow      | Top land, allotments & intakes: wooded rough grazing |
| Daleside farmland: pasture & meadow        | Upland woods   |
| Daleside farmland: walled pasture & meadow | Upland woods: forest                                 |
| Gill pastures                              | Upland woods: gills & gorges                         |
| Lakes & ponds                              |  |

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# Local Landscape Types

## Upper Dale

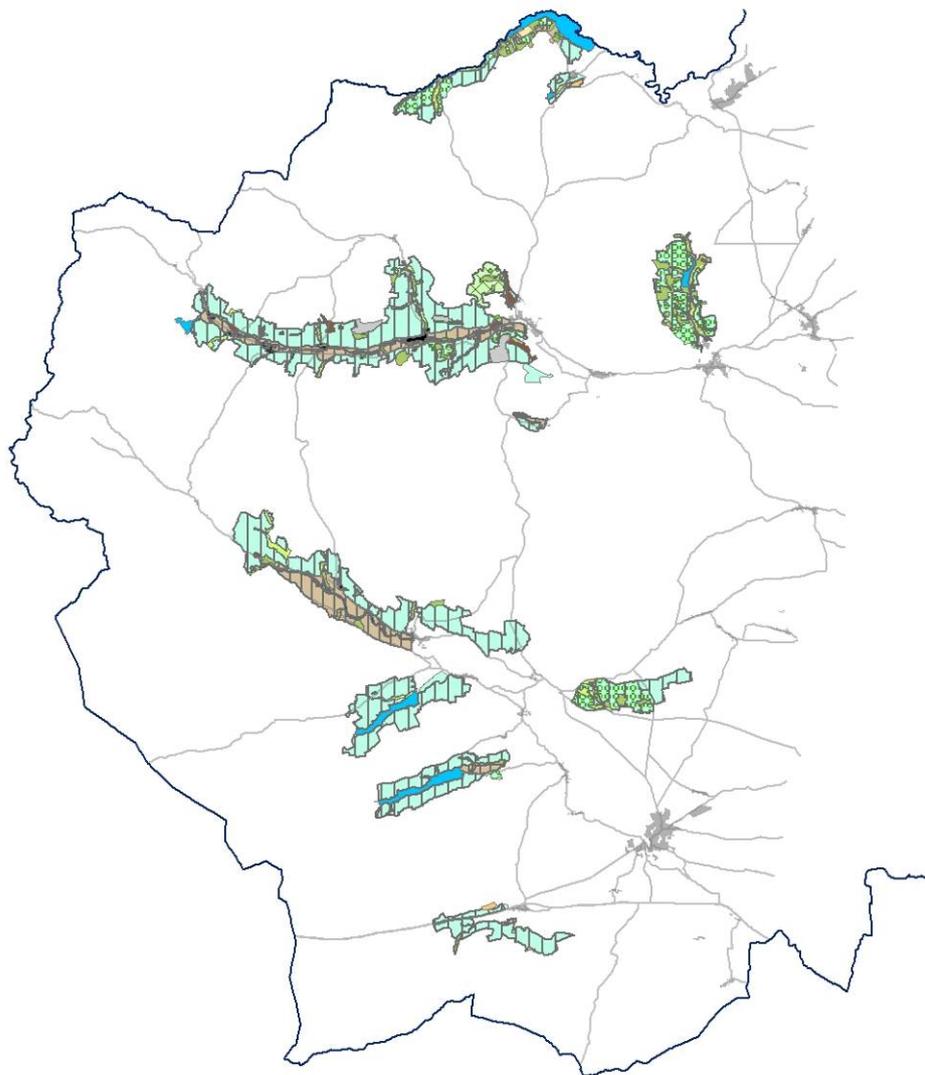


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|--|--|
| County Boundary                              | Gill pastures  |
| Settlements                                  | Lakes & ponds  |
| Roads  | Low moor   |
| Urban  | River: upper reaches                                 |
| Infrastructure                               | Top land allotments & intakes: wooded pasture        |
| Disturbed land                               | Top land, allotments & intakes: open pasture         |
| Mineral working                              | Top land, allotments & intakes: open rough grazing   |
| Craggs, scars & stone bands                  | Top land, allotments & intakes: wooded rough grazing |
| Dale floor farmland: walled pasture & meadow | Upland woods   |
| Dale reservoir                               | Upland woods: gills & gorges                         |
| Daleside farmland: pasture & meadow          | Upland woods: juniper                                |
| Daleside farmland: walled pasture & meadow   |  |

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# Local Landscape Types

## Middle Dale

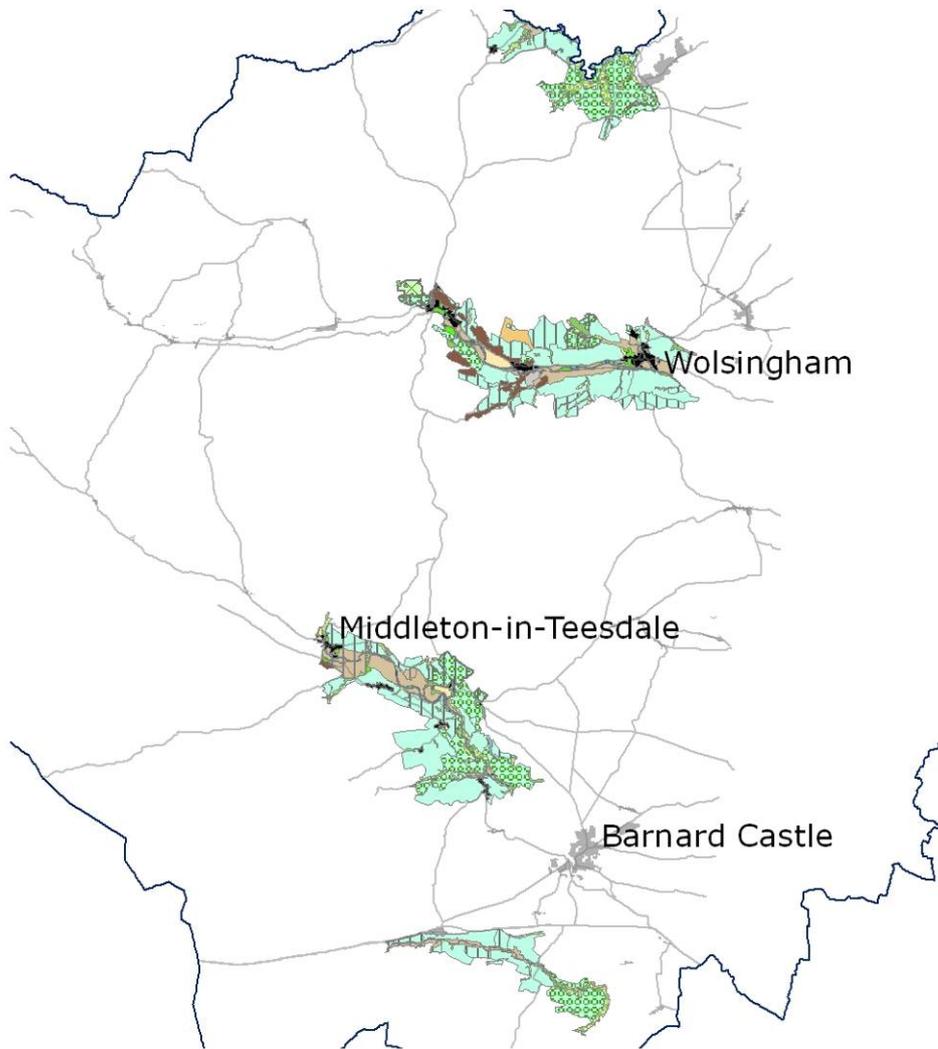


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|--|--|
| County Boundary                              | Daleside farmland: wooded pasture & meadow         |
| Settlements                                  | Daleside farmland: wooded walled pasture & meadow  |
| Roads  | Gill pastures                                      |
| Urban  | Lakes & ponds                                      |
| Disturbed land                               | Parkland   |
| Infrastructure                               | Parks & recreation grounds                         |
| Mineral working                              | River: upper reaches                               |
| Dale floor farmland: pasture & meadow        | Steep daleside bluff: pasture                      |
| Dale floor farmland: walled pasture & meadow | Top land, allotments & intakes: open pasture       |
| Dale reservoir                               | Top land, allotments & intakes: open rough grazing |
| Daleside farmland: pasture & meadow          | Upland woods                                       |
| Daleside farmland: walled pasture & meadow   | Upland woods: gills & gorges                       |
| Daleside farmland: wooded estate pasture     | Upland woods: riverside                            |

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# Local Landscape Types

## Lower Dale



- |  |   |
|--|---|
| County Boundary                              | Daleside farmland: wooded estate pasture          |
| Settlements                                  | Daleside farmland: wooded pasture & meadow        |
| Roads  | Daleside farmland: wooded walled pasture & meadow |
| Urban  | Gill pastures                                     |
| Infrastructure                               | Parkland  |
| Disturbed land                               | Parks & recreation grounds                        |
| Mineral working                              | River: upper reaches                              |
| Craggs, scars & stone bands                  | Steep daleside bluff: pasture                     |
| Dale floor farmland: pasture & meadow        | Top land, allotments & intakes: open pasture      |
| Dale floor farmland: walled pasture & meadow | Upland woods                                      |
| Dale reservoir                               | Upland woods: gills & gorges                      |
| Daleside farmland: pasture & meadow          | Upland woods: riverside                           |
| Daleside farmland: walled pasture & meadow   |   |

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