



### White Peak



Looking towards Foolow © Peak District National Park Authority



#### Introduction

The White Peak is an area of settled uplands lying on both sides of the boundary between Derbyshire and Staffordshire at the southern end of the Pennine Hills. The term derives from the limestone geology which provides the distinctive grey and white stone used extensively for building and walling materials. The region comprises an elevated limestone plateau dissected by deeply cut dales and gorges, which contrast strongly with the adjoining landscapes of the Dark Peak, South West Peak and Derbyshire Peak Fringe.

#### Physical influences

The physical structure of the White Peak is strongly influenced by weathering and erosion of the underlying Carboniferous limestone. This can be subdivided into three distinct types of rock, each producing a different shape to the land surface. The most common type over much of the central plateau, the so-called 'shelf' limestone, is pale grey in colour and thickly bedded in gently dipping layers, giving a gently rolling topography. In the south-west of the region is the 'basin' limestone, which is darker grey in colour and occurs in thinner, more strongly folded beds. The least common is the 'reef' limestone, which is rich in fossils and largely devoid of bedding. The last, which is a hard, fine-grained rock, resists weathering and produces conical hills, known as 'reef knolls', around the plateau edge, for example at Thorpe Cloud and Wetton Hill.

Two belts of dolomitized limestone occur in the south-east of the region. The most distinctive landscape features associated with these limestones are the prominent dolomite tors, notably Rainster Rocks and Harboro Rocks. Volcanic rocks, locally termed 'toadstones', also commonly occur interbedded within the limestone in the White Peak and were traditionally important because they were associated with spring lines.

The movement of mineralizing fluids through faults during deep burial of the sediments, probably at the end of the Carboniferous period, has left large mineral deposits of lead, copper and zinc ores, as well as fluorspar, calcite and barytes, which often run in veins through the limestone bedrock. These deposits have been worked extensively in the White Peak, leaving many disused mines, linear rakes and spoil heaps throughout the landscape.

The gently rolling plateau of the limestone is deeply dissected by the rivers Manifold, Hamps, Dove, Lathkill, Wye and Derwent, along with their associated network of tributary valleys which are often dry for some or all of the year. Some dales, such as Dovedale and Monsal Dale have impressive gorge-like incisions created by glacial meltwaters, which cut into the limestone plateau in a series of tight loops. Some of the main gorges have rivers and streams flowing through them, but the Manifold, Hamps and the upper Lathkill gorges are seasonal, with the water passing through the underground cave systems in summer. Locally at the edge of the White Peak a number of sinkholes drain water directly into the cave system.

#### Ecological influences

For the most part the soils in the White Peak are derived from loess, a fine silty sediment that was deposited during the final phase of the last glacial period by cold icy winds sweeping across the limestone plateau. This helps to explain how, despite the moderately high altitude, agriculturally productive pastures on rich loamy soils predominate over extensive areas. Although the majority of this land has been agriculturally improved to varying extents, a limited number of flower-rich hay meadows survive in places and typically support species such as oxeye daisy, knapweed, yellow rattle and lady's bedstraw. Skylarks are widespread, and curlew breed in small

numbers. Where soils are shallow, especially on crests and steep slopes, occasional flower-rich pastures and calcareous grasslands survive. Limited areas of arable land occur in places, but can be important for brown hares and birds such as lapwing, yellowhammer and, rarely, yellow wagtail. Small shelter belt plantations provide habitat for commoner woodland birds and other animals, and the network of dewponds is particularly important for great crested newts. Road verges can support important relics of formerly more widespread vegetation, ranging from characteristic swathes of meadow cranesbill to relic patches of heather. A small number of silica sand pits support several important species such as clubmosses.

On higher ground, the soils are often poorer and leached, giving rise to acid grassland and heath. These habitats were once widespread across much of the limestone plateau. Above 350 metres the cooler climate favours the development of peaty topsoils and ironpans with impeded drainage. Such factors limit the agricultural potential of the land in these areas and in places, a few small relics of the original limestone heath survive. More commonly, patches of hilltop rough grazing land occur, often supporting acid grassland with species such as mountain pansy and bilberry in the sward.

On the steeper slopes of the dales and around the edge of the limestone plateau, shallow soils with dark, humose surface layers predominate. As these slopes are often too steep for pasture improvement they commonly support strikingly species-rich calcareous grassland with early purple orchids, cowslips, wood anemones, rockrose, wild thyme and an abundance of other limeloving plants, with a correspondingly rich insect life. On deeper soils in the dales neutral species-rich grassland is widespread, and on ungrazed or lightly grazed north-facing slopes a particular type rich in tall herbs such as valerian and ferns has developed very locally. This provides the British stronghold for the elegant jacob's ladder. Towards the top of the slopes, where loess has washed down from the plateau above, more acid grassland often occurs. Limestone cliffs and scree are a common feature throughout the dales. They provide nesting sites for birds such as raven, and are important for their plantlife, mosses, liverworts and lichens, and specialised invertebrates.

Semi-natural ash woodland, much of it ancient, clothes extensive areas of steep slopes on many dalesides. Wych elm and hazel are typical associates, and the ground flora is very varied with ramsons often dominating the heavier soils on lower slopes, and dog's mercury and woodland grasses dominating shallower soils and stony ground on the higher slopes. These woodlands support a large number of rare and scarce plants and invertebrates, and typical birds include marsh tit, redstart and a variety of warblers. Areas of scrub are also widespread in many dales: both species-rich hazel scrub which can be particularly important for plants such as globeflower and for butterflies such as dark green fritillary, and more invasive hawthorn scrub. Many dales are dry, but others carry winterbourne streams or more substantial rivers such as the Wye and Dove famed for their trout fishing. Beds of water-crowfoot are typical of permanent sections, whilst reed canary-grass is common along the edges. Large beds of butterbur are particularly characteristic along ungrazed riverbanks. In a few places springs emerge on the lower dalesides, giving rise to basic flushes rich in sedges and other plants, and with an important invertebrate fauna.

Lead mining has had an important influence across much of the White Peak. Remnant spoil heaps frequently occur as linear features across the landscape, and support a mosaic of important grassland types including specialised metal-tolerant plant communities characterised by species such as spring sandwort ('leadwort'). Both lead mine shafts and natural caves can be important for various bat species.



Green Well in Alstonfield © Peak District National Park Authority

#### Human influences

The White Peak has been a focus for settlement since prehistoric times and numerous surviving monuments indicate the extent of former settlement and land use. These include Neolithic ritual monuments such as chambered tombs, long barrows and henges, as for example Arbor Low and Minninglow. Most of the monuments of this period are confined to the limestone plateau, reflecting a significant historic landscape component for this part of the National Park. Bronze Age round barrows are also commonly found in the White Peak, often forming obvious hilltop landmarks. Earthworks relating to Romano-British farmsteads also survive on the limestone plateau.

Today, although not a densely settled region, the White Peak has a very definite nucleated pattern of small rural villages with medieval origins, typically situated at the centre of their former open fields. Beyond the open fields, isolated farmsteads occur. While some of these farms have origins as medieval monastic granges, most reflect the post-medieval enclosure of the once extensive commons that formerly covered much of the limestone plateau. The widespread use of place names ending in moor, heath and common, and extensive historical documentation for rights of turbary (the stripping of soils to use as fuel), indicate the former extent of semi-natural vegetation and peaty soils in this landscape.

Field patterns within the White Peak, although not as diverse as those in neighbouring regions, are very distinctive due to the widespread occurrence of drystone walls, constructed from the local limestone. Small narrow fields, indicating the piecemeal enclosure of earlier open field strips, are a characteristic feature around villages. There are also sub-rectangular fields, often quite large with somewhat sinuous boundaries, particularly around granges.

Elsewhere, the enclosure is mostly later, either private or late 18th to early 19th century Parliamentary Enclosure of former wastes and commons, distinguished by a more regular pattern of medium to large sized fields, with ruler-straight boundaries, dissected by straight roads. Regular field boundaries have generally been built using quarried stone and tend to be neater in appearance than the more random rubble walls of earlier periods. Isolated stone field barns, often of 18th and 19th century date and incorporated within the pattern of stone walls, form a distinctive landscape feature in many places and are concentrated in some areas, for example around Bonsall, Winster and Bakewell.

Two minor but important types of agricultural feature which add significantly to local character are dewponds and field kilns. With the enclosure of most of the commons in the 18th and early 19th century, farmers lost easy access to streams and natural meres for their stock, thus many small circular lined ponds were constructed within the fields. When the commons were first improved large quantities of lime produced by individual farmers was spread on the newly allocated land to burn back the rank vegetation before reseeding. Afterwards, lime often continued to be added in smaller quantities to counteract the natural acidity of soils on the plateau. The kilns were small and either circular or oval in plan and several hundred still survive next to their associated field quarries.

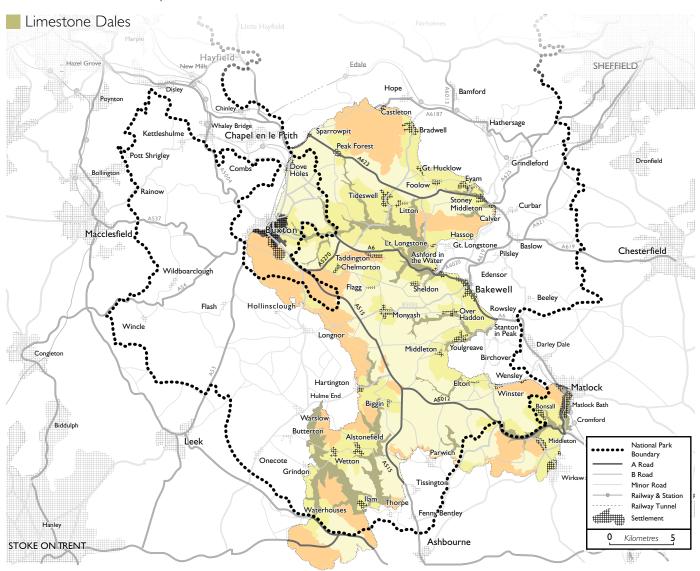
Naturally occurring minerals in the limestone, in particular lead ore, have been exploited in the White Peak since at least the Roman period and at times, particularly between 1650 and 1850, brought significant wealth to the area. Although lead mining is now a defunct industry, the remaining evidence of past workings is often marked by distinctive linear features, known as lead rakes, which are typically associated with waste heaps, pits and shafts, sometimes with much rarer features such as derelict engine houses. Quarrying has also been a feature from the 17th century onwards, often for lime production, but latterly also for roadstone and cement, and continues today on a huge scale in certain parts of the White Peak. These industrial features are very important aspects of the White Peak landscape character.

#### Sense of place

The character of the White Peak is strongly influenced by the underlying geology, which has had a dominant and unifying effect on the character of the landscape. This unity is emphasised by the recurrent visual themes of the high open plateau, stone walls, pastoral farmland and villages built of local stone. It is reinforced by the visually prominent dales that dissect the plateau and the sparsely populated nature of the higher hills and slopes.

The White Peak can be subdivided into four different landscape types, each of which is characterised by a particular aspect of the wider White Peak character. These landscape types, which have been defined by their broadly repeating patterns of natural elements and cultural factors, are:

- Limestone Village Farmlands
- Limestone Plateau Pastures
- Limestone Hills & Slopes



#### Limestone Village Farmlands

A small-scale settled agricultural landscape characterised by limestone villages, set within a repeating pattern of narrow strip fields bounded by drystone walls.



Fields nr Foolow © Peak District National Park Authority



- A gently undulating plateau
- Pastoral farmland enclosed by drystone walls made from limestone
- A repeating pattern of narrow strip fields originating from medieval open fields
- Scattered boundary trees and tree groups around buildings
- Discrete limestone villages and clusters of stone dwellings
- Relict mine shafts and associated lead mining remains
- Localised field dewponds



The Limestone Village Farmlands has a scattered distribution, occurring throughout the White Peak as a series of small, but discrete units, typically located in lower, more advantaged parts of the limestone plateau. This landscape largely exists on the land above either side of the Wye valley as well as along the eastern fringe of the plateau. Several other more isolated areas occur in the northern and south-western parts of the White Peak.

#### Geology and landform

This settled agricultural landscape is closely associated with deeper patches of wind blown drift that have been deposited across the limestone plateau. For the most part the plateau has a gently rolling landform and the villages here not only take advantage of the best agricultural land, but each is also sited where there was a secure supply of water, often at spring lines or the edge of the plateau where there were running streams. In places, notably at Winster, Youlgreave, Little Longstone and Bradwell, this landscape is associated with more sloping or undulating ground that lies along the edge of the plateau.

#### Soils and vegetation

The wind blown drift with which this landscape is associated, gives rise to patches of relatively deep and fertile soils and together with the secure access to drinking water, explains why people settled and started farming the surrounding land in the first place. There are also patches of poorer, thin soils with some rock outcrops. As a result of the long history of continual farming in close proximity to the village there is little surviving semi-natural vegetation within this settled pastoral landscape.

#### Tree cover

Tree cover is largely restricted to small groups of trees and a scattering of trees along boundaries around village margins, often creating quite intimate rural scenes. Elsewhere the landscape is often more open, but even here more distant views are typically framed by surrounding hills, or rising ground.

#### Land use

Although it has a largely pastoral character today, dominated by stock rearing and dairying, historically this landscape had once a more mixed farming character. Dewponds which provided a source of water are a relatively common historical feature.

A significant amount of lead mining has taken place, particularly in the areas in the northern and eastern parts of the plateau, and in places historic features are still extensive.

#### Enclosure

The farmed landscape is characterised by a sub-regular pattern of small to medium sized fields enclosed by drystone walls built out of the local pale coloured limestone. Large areas of narrow fields exist in many places, reflecting piecemeal enclosure of strips in the former open fields from late medieval times onwards. Field pattern tends to be a fairly prominent element in this landscape, creating a strong sense of scale and visual unity.



Drystone walls near Litton © Peak District National Park Authority

#### Settlement and buildings

The present settlement pattern is long established within this landscape, with origins before the Norman Conquest, and tends to be strongly nucleated, with most farmsteads and dwellings concentrated into a central village within each parish, reflecting historic townships. Today's buildings, with the exception of some medieval churches, date mostly from the 17th century onwards. These buildings are typically constructed from the local Carboniferous limestone, often with random rubble constructed walls and stone tile, or Welsh slate roofs. This creates a very distinctive and unified settlement character. The use of gritstone is also common, but tends to be restricted to features such as lintels and window surrounds.

#### Transport and access

In this landscape there is often a network of narrow lanes defined by stone walls. The lanes were originally created to give access to the former open fields and commons and other villages beyond, while the walls were added later when the open fields were enclosed. Today these lanes are linked by a network of tracks and field footpaths, generally enabling good access throughout this landscape.

#### Limestone Plateau Pastures

An upland pastoral landscape with a regular pattern of straight roads and small to medium sized rectangular fields bounded by limestone walls. Tree cover is mostly limited to occasional tree groups, or small shelter belts, allowing wide views to the surrounding higher ground.



Field barn on the Limestone Plateau © Peak District National Park Authority



- A rolling upland plateau
- · Pastoral farmland enclosed by limestone walls
- · A regular pattern of small to medium sized rectangular fields
- · Localised field dewponds and farm limekilns
- Discrete tree groups and belts of trees
- Isolated stone farmsteads and field barns
- Medieval granges surrounded by older fields
- Relict lead mining and quarrying remains
- Prehistoric monuments, often on hilltops
- Open views to surrounding higher ground



The Limestone Plateau Pastures is a planned agricultural landscape, derived from the enclosure of former commons around and beyond the older settled core of the village farmlands. The largest area of this landscape occurs in the central part of the limestone plateau from Flagg to Bonsall Moor. Another large area occurs to the north from Fairfield to Calver, and there are several smaller areas, such as Calton Moor to the south.

#### Geology and landform

Like the Limestone Village Farmlands, this landscape is mostly associated with the more gently rolling central and eastern parts of the limestone plateau. Much of this area is overlain by wind blown drift.

#### Soils and vegetation

The shallow free-draining soils which characterise the main part of the limestone plateau were reserved as common land and utilised as rough grazing until relatively recent times. However, much of this land was enclosed in the 18th and 19th centuries, when it was ploughed and reseeded to improve the pasture. Today, only small relics of unimproved grassland survive, in areas where the ground is unsuitable for cultivation, such as along lead rakes and on the more exposed crests close to rock outcrops, where the soils are particularly thin.

#### Tree cover

For the most part the Limestone Plateau Pastures have a fairly open character where tree cover is largely restricted to discrete groups of trees, often around farmsteads. In places, larger coverts and occasional belts of sycamore, beech or ash trees, often planted on abandoned lead rakes, provide a stronger sense of enclosure. These linear or rectangular shelter belts are a distinctive feature of the White Peak landscape.

#### Land use

In relation to the surrounding upland landscapes in the Peak District, this is an intensively farmed agricultural landscape where stock rearing and dairying are the primary land uses. Two types of historical feature that are relatively common are dewponds and field kilns.

Large amounts of lead mining have also taken place in the past, particularly in the northern and eastern parts of the plateau, and historic features are still extensive in places. The landscapes around Dove Holes and Peak Forest are exceptional for the large number of early industrial limekilns and shallow quarries, dating from the 17th to the early 19th centuries.

#### Enclosure

Enclosure is characterised by small to medium sized fields defined by stone walls. The straight boundaries and regular enclosure pattern are strong and very distinct features of this landscape, reflecting the relatively late enclosure from common and waste. Many of the enclosures were the result of later 18th and earlier 19th century Parliamentary Enclosure Awards, others were enclosed by private agreement. There are also other areas, such as between Meadow Place Grange and One Ash Grange, where there is significantly earlier sub-rectangular and irregular enclosure associated with medieval monastic granges.

#### Settlement and buildings

This is a landscape of isolated stone farmsteads and scattered stone field barns, mostly dating from the period of Parliamentary Enclosure in the late 18th and earliery 19th centuries. There are also medieval granges, although today's buildings are mostly later rebuilds from the 17th century onwards.

There is also a scattering of prehistoric monuments including the henges at Arbor Low and the Bull Ring, Neolithic chambered tombs and round barrows on hilltops,

#### Transport and access

This is a planned landscape, with a pattern of straight roads defined by stone walls, reflecting the late enclosure of the land from common and waste. Some roads were created as turnpike routes. Occasional tracks and field footpaths are also present in places.

#### Limestone Hills & Slopes

A high pastoral landscape with a varied undulating topography and some steep slopes. This is a remote, sparsely populated landscape with a regular pattern of mostly medium to large walled fields, interspersed in places with extensive patches of rough ground and elsewhere by smaller regular fields. There are wide open views to distant skylines, especially around the edges of the White Peak.



Chrome Hill © Peak District National Park Authority



- · High, undulating, in places steeply sloping topography
- Frequent rock outcrops on steeper ground
- Rich wildlife habitats including large patches of limestone grassland and limestone heath on the highest ground
- A regular pattern of medium to large walled fields
- Occasional groups and belts of trees
- Prehistoric monuments, often on hilltops
- Relict lead mining remains
- Wide open views to distant skylines



The Limestone Hills & Slopes is a visually prominent landscape which, where high, can be seen from most places within the White Peak. In other places it forms the steep edges to the plateau and can be seen from extensive adjacent areas of shale valley and gritstone upland. It occurs in a series of discrete units around the northern, western and southern edge of the White Peak and in two smaller outlying areas at Longstone Moor and South Darley.

#### Geology and landform

The underlying Carboniferous limestone strongly influences the nature of the landform in the Limestone Hills & Slopes, creating a high, in places steeply sloping topography and allowing wide views to distant skylines. This landscape forms the most elevated part of the White Peak, rising to over 470 metres at Bradwell Moor. The limestone bedrock is hard and slowly eroded, giving rise to a moderately undulating landform with numerous hill summits and many patches of exposed rock. Distinctive tors are found in the areas of dolomitic limestone. Where reef limestone predominates, landform is commonly one of discrete, steep hills rising above the surrounding land.

#### Soils and vegetation

Soils are variable with generally thin, often stony soils associated with limestone outcrops, peaty soils on the highest, leached ground, and patches of deeper soils elsewhere. These soils support a range of vegetation types. Of special importance are the relatively rare remaining areas of limestone heath, largely consisting of heather, with bilberry and western gorse, associated with poorer soils developed on acidic wind blown silt. On hilltops and steep slopes a mosaic of semi-natural vegetation can be found including patches of both calcareous and acid grassland. Where grazing no longer takes place, localised patches of gorse, bracken and scrub are found. Elsewhere improved grassland dominates over deeper soils with isolated hay meadows and unimproved pastures.



 $\textbf{Limestone outcrops} \\ @ \\ \textit{Peak District National Park Authority} \\$ 

#### Tree cover

This is a fairly exposed, and in places treeless landscape with open views. In some more sheltered areas with deeper soils, small plantations and tree groups associated with farmsteads can be found.

#### Land use

For the most part this is a pastoral landscape with improved grassland and localised hay meadows but in places, notably on the steeper slopes and higher summits, large tracts of rough grazing land have survived.

A significant amount of lead mining has taken place, particularly in the northern and eastern areas, often following linear rakes; in places historic features are still extensive. This landscape has also been heavily influenced in places by quarrying, with large active quarries near Buxton and above Hope. Grin Hill near Buxton is exceptional for its large number of early industrial limekilns and shallow quarries which date from the 17th century to the early 19th century.

#### Enclosure

Predominantly medium to large sized fields are defined by stone walls. In places, the topography defines the enclosure pattern. The straight boundaries and regular enclosure pattern reflect the late enclosure of this landscape from common and waste in the late 18th and early 19th centuries. Many of the enclosures were the result of Parliamentary Enclosure Awards; some areas were enclosed by private agreement. Unusually, parts of the Castleton commons around Dirtlow Rake were enclosed using long ruler-straight boundaries as early as the 1691. There area also other areas, such as around Cronkstone and Cotesfield Granges, where there is significantly earlier sub-rectangular and irregular enclosure associated with medieval monastic granges.

#### Settlement and buildings

This is a sparsely settled landscape with only occasional, large, isolated stone farmsteads, many of which were first established in the 18th or 19th centuries. The higher parts of the limestone plateau is also characterised by a scattering of older medieval granges, although today's buildings are later rebuilds, dating from the 17th century onwards. There is a large number of surviving prehistoric monuments, often prominently sited on the highest hilltops.

#### Transport and access

There are fewer roads in this sparsely settled landscape than across much of the limestone plateau, leaving large areas that are only accessible by foot. Most of the roads are straight and defined by stone walls, reflecting the late enclosure from common and waste; others are determined by the topography and some cut across areas of unenclosed land. Some of these roads were created as turnpikes.

#### Limestone Dales

A steeply sloping dale landscape with limestone outcrops and extensive tracts of woodland and scrub intermixed with limestone grassland. In some smaller dales this is an intimate, secluded landscape where views are tightly controlled by landform and tree cover, in others the dales are wild and open.



Peter's Stone, Cressbrook Dale © Peak District National Park Authority



- Steep sided Limestone Dales
- Craggy outcrops, cliffs and scree slopes
- Extensive patches of limestone grassland
- Interlocking blocks of ancient semi-natural woodland, secondary woodland and scrub
- Largely unsettled, apart from occasional small mill settlements
- Historic mineral working (quarrying, lead mining)



The Limestone Dales is distinctive, but localised landscape type. Because of the way in which they are deeply cut into the limestone, they are more or less hidden from view from within the adjoining plateau landscapes. The rivers Wye, Dove, Manifold, Hamps, Lathkill and Derwent flow through well developed dale landscapes. There are also a number of associated smaller, outlying dry valley dales.

#### Geology and landform

This is a landscape with a prominent topography, characterised by steeply sloping, in places vertical, valley sides cut deeply into the underlying limestone bedrock. Many of the dalesides have frequent outcrops of greyish white limestone, sometimes forming precipitous rock buttresses with scree slopes. Most of the larger dales have fast moving rivers flowing within rocky river beds. The smaller dales tend either to be dry, or have only winterbourne streams, owing to the fact that water percolates through the bedrock.

#### Soils and vegetation

The limestone is overlain by very shallow, in places strongly calcareous, upland soils. These soils are thinnest on the steeper rocky slopes and deeper along the valley floor. Extensive areas of unimproved limestone grassland are a feature of this landscape, the grasses being characterised by fine-leaved fescues and quaking grass, along with many small herbs like common rockrose and wild thyme. The abundance of early purple orchids and cowslips in the spring is a striking feature of many dale sides. Where grazing is restricted, the grasslands are commonly mixed with other semi-natural habitats such as deciduous woodland and scrub. Of particular note are the daleside ash woods, dominated by ash, but also including oak, hazel and wych elm.



Cowslip © Peak District National Park Authority

#### Tree cover

Tree cover is a key feature of the dales, although in places its extent is limited. Some dalesides, like those in the Wye and Manifold valleys, are extensively wooded with large tracts of semi-natural woodland dominated by ash and hazel. Deciduous plantations also occur in some dales. In other dales, woodland cover is more sporadic and tends to be associated with scrub dominated by hawthorn. Overall the woodland cover, coupled with the steep valley sides, can create a strong sense of visual containment.

#### Land use

As the slopes in the dales are too steep for agricultural improvement, this landscape still retains extensive areas of unimproved grassland and semi-natural woodland, with the former used mainly for rough grazing by sheep. In parts of the Wye Valley, Lathkill Dale and the Via Gellia the remains of past lead mining and quarrying are important features.

#### **Enclosure**

This is essentially a 'wild', unenclosed landscape, although the valleys are subdivided, by occasional drystone walls, into large enclosures related to land ownership and woodland management.

#### Settlement and buildings

Human habitation is not a feature of this landscape owing to the topographical inaccessibility of the Limestone Dales. Some manmade activities do impact on this character including the large water powered textile mills at Cressbrook and Litton Mills in the Wye valley, and smaller mills such as the corn mill at Wetton Mill, and the lead processing and other mills in the Via Gellia.

#### Transport and access

Roads are generally not a feature of this landscape, except where the dale is used as an access route into the White Peak, such as in the Wye valley east of Buxton, at Middleton Dale and the Via Gellia. These are late 17th to early 19th century turnpike roads. Elsewhere access is by foot, often by way of a well defined path along the valley bottom. Some dales were affected by the mid 19th century construction of railways, although some routes are no longer in use and form popular walking routes such as the Monsal Trail.

### Overall Strategy



Chrome Hill © Peak District National Park Authority

The underlying limestone geology has a dominant and unifying effect on the character of the White Peak. This unity is emphasised by the recurrent visual themes of the high open plateau, stone walls, pastoral farmland and villages built of local stone, to create a strong regional character. The condition of the landscape is variable, with a generally well maintained and intact historic settlement and field pattern. There is, however, evidence of a substantial historic loss of semi-natural habitats; a loss or deterioration of some features such as lead mining remains, dewponds and traditional plantation woodlands; and dereliction in some of the wilder parts of the region. The limestone villages and dales are an important focus for many visitors to the National Park, and strengthening their character will ensure this focus can continue into the future.

The overall strategy for the White Peak should therefore be to:

Protect and manage the distinctive and valued historic character of the settled, agricultural landscapes, whilst seeking opportunities to enhance the wild character and diversity of remoter areas.

This can be achieved by ensuring that

- there is a sustainable land management system to uphold the existing settled, agricultural landscapes
- there is a network of vibrant communities sustaining traditional buildings and settlements
- there are innovative and proactive schemes to restore and create distinctive White Peak habitats on suitable sites



Hill near Longnor in snow © Peak District National Park Authority

To achieve this strategy there are particular priorities for each of the different landscape character types in the White Peak.

#### Limestone Village Farmlands

This is a historic landscape and the most settled agricultural landscape of the White Peak, characterised by repeating patterns of narrow strip fields usually resulting from the enclosure of Medieval open fields. These field systems surround associated limestone villages with traditional stone-built buildings. The priority should be to protect the historic pattern of enclosure, the nucleated settlement pattern and the integrity and setting of traditional buildings, whilst restoring the biodiversity of the pastoral farmland within a sustainable farming system.

#### Limestone Plateau Pastures

This is a more recent, planned agricultural landscape with a regular pattern of historic, small to medium sized, rectangular fields, usually resulting from the enclosure of Medieval wastes and commons, and discrete groups/blocks of trees. The priority should be to protect the historic pattern of enclosure and the wooded character, whilst restoring the biodiversity of the pastoral farmland and expanding boundary trees where appropriate, within a sustainable farming system.

#### Limestone Hills & Slopes

This is a higher, more remote landscape with frequent, and in places extensive, patches of rough ground. The priority is to protect and restore the diversity of the more remote landscapes and, where possible, to create a mosaic of extensive areas of unenclosed limestone grassland, heath, scrub and woodland.

#### Limestone Dales

This is an intimate, secluded and largely semi-natural landscape, where views are often tightly controlled by landform and tree cover. The priority in this landscape is to protect and manage the mosaic of internationally important grassland, scrub, woodland, rock and river habitats, and the cultural heritage features, while seeking opportunities to enhance diversity and opportunities for people to enjoy the landscape.

#### Issues of change

#### Conservation

The White Peak is a pastoral landscape dominated by historic patterns of settlement and enclosure with relics of its post-industrial heritage. Semi-natural landscapes are largely confined to the areas with steeper slopes or poorer soils, most notably in the Limestone Dales, whilst large parts of the plateau have been agriculturally improved with only relic areas of limestone heathland surviving. These components are all essential for the character of the landscape. Important cultural heritage and historic landscapes, including field patterns, industrial heritage and mineral remains, are in poor condition or threatened by the reworking of mineral resources and agricultural improvement. Field barns are now often redundant and are at risk from abandonment and material robbing. Animal welfare standards mean that they are no longer appropriate for housing stock. Scrub is an important transitional landscape between the open grasslands and enclosed woodlands in the dales, but changes in agriculture have altered the balance, increasing the quantity of scrub.

#### Climate change implications

With drier summers predicted, the water flow in limestone rivers and streams may become more seasonal. It is likely that increased temperatures will lead to change in the composition of woodlands, limestone grasslands, and limestone heath. It may also result in agricultural changes such as increased suitability for arable crops or, with wetter winters, increased demand for winter housing for livestock. All these issues pose a threat to the character and visual diversity of the landscape.

### Demography, housing and employment

The number and size of existing settlements have created a demand for new housing and commercial development in the White Peak. There is very limited potential for opportunistic or large scale sites which could provide for this. Further development could affect the character of the historic settlement pattern and its associated field boundaries. The White Peak is, in parts, well settled with villages, and it is a popular area, often for people who commute outside the area and people who work from home. The impact of this is that house prices are relatively high and affordable housing is in short supply. Some parts of the area, such as Litton and Tideswell, are popular locations for second homes and this further affects demand and pricing. In recent years, there has been an increase in planning applications to convert existing traditional buildings into housing. If this trend continues it could affect the character of the landscape, particularly the more sparsely settled areas where evidence of the effects of residential properties, such as car parking or lighting, is currently very limited.

#### Tourism and recreation

Specific locations within the White Peak meet the recreational needs of large numbers of people. These areas, particularly the Limestone Dales, are cherished and valued by the residents and visitors. There is localised heavy recreational pressure for active sports such as mountain biking and driving or use of motorised off-road vehicles.

#### Farming and forestry

The White Peak is a largely traditional pastoral landscape, where land is managed at a moderate intensity, allowing occasional patches or fields of more species-rich grassland to survive in places. There has been significant intensification of use, mainly in the Plateau Pastures, which has probably resulted in a substantial loss of natural landscapes. Generally this has not had an impact on the historic stone walled field pattern, which is a significant feature of the area. In places, however, the boundaries are less well maintained, particularly on some of the higher and more steeply sloping ground, where grazing has sometimes ceased. Agricultural intensification has been accompanied by dereliction of traditional stone field barns and an increase in large modern agricultural buildings for housing livestock. Changes to the agricultural economy have resulted in farm diversification. A landscape such as the White Peak, with strong visitor numbers, provides opportunity for tourism-based diversification. Such changes to agricultural practices could result in landscape change.

Both scrub and secondary woodland have increased extensively in the Limestone Dales over the last 100 years, resulting in a more wooded landscape but with the loss of valued views and species-rich grassland in places. In the Plateau Pastures many of the characteristic linear shelterbelts, small plantation woodlands and boundary trees are threatened by neglect, with ageing trees and little replacement planting.

#### Minerals and resources

Quarries in the White Peak serve local and national demand for limestone used by the construction, cement and chemical industries. In addition, there is a national demand for vein minerals, e.g. fluorspar, used by the chemical industry. There are many landscape impacts associated with these sites, including visual intrusion, adverse effects on the historic landscapes and cultural heritage features, wildlife habitats, associated infrastructure and transportation of products, and tranquillity. There is also pressure to extend the size of the quarries and prolong quarrying beyond the dates of current planning permissions. In places quarrying has gone below the water table, resulting in an entirely new landscape.

#### Energy and infrastructure

There is an increasing national demand for renewable energy schemes, particularly wind power. In addition there is increasing potential for solar and water power, and other renewable energy sources. Inappropriate wind generation projects could adversely impact on landscape character, the setting of historic features and landscapes, amenity value and tranquillity. Appropriately sited and designed small-scale hydroelectric schemes could provide opportunities for the restoration of historic features such as mills, ponds and leats. There is a visual impact of existing infrastructure associated with power supply, e.g. overhead electricity cables. There are limited opportunities for woodland management to diversify and provide local wood fuel.

Road safety is a major issue in the White Peak, leading to an increase in number and size of road signs. High levels of vehicle use are increasing damage to roads, walls and verges, leading to a loss of historic features, and creating an increased demand for parking.



Drystone wall and wild flowers Sheldon @ Peak District National Park Authority



### Landscape guidelines

# Limestone Village Farmlands Limestone Plateau Pastures Limestone Hills & Slopes Limestone Dales

#### White Peak

#### **Protect**

Protect the strongly nucleated settlement pattern of villages and scattered farms		
Protect and maintain the historic field pattern		0
Protect and maintain historic drystone walls		
Protect and maintain historic field barns		$\bigcirc$

#### Manage

Manage and enhance surviving areas of natural landscapes				
Enhance the diversity of agricultural grassland				
Manage traditional plantation woodlands				
Manage and enhance woodlands				
Manage and enhance linear tree cover and amenity trees				0
Manage the network of tracks and footpaths to maximise opportunities to enjoy the landscape	0	0		
Manage the network of minor roads to maintain character and local access			0	
Manage historic mineral landscapes	•			0

#### Plan

Create areas of limestone grassland and heath	0	$\bigcirc$	
Create new native broadleaved woodland	0	$\bigcirc$	
Develop appropriate landscapes from mineral workings	0		0
Develop small-scale renewable energy for local needs		$\bigcirc$	

- This is a priority throughout the landscape character type
- This is a priority in some parts of the landscape character type, often associated with particular conditions/features
- This is not a priority but may be considered in some locations

This will generally be inappropriate in this landscape character type

# Landscape guidelines explanation

#### **Protect**

# Protect the strongly nucleated settlement pattern of villages and scattered farms

The character of the White Peak is typified by the historic pattern and distinctive vernacular style of its small limestone villages. In order to maintain the integrity of the historic fabric, character and setting of settlements and buildings, new development and conversions should respond positively to the historical settlement pattern, density, local materials and building traditions. Traditional buildings are an important feature and their renovation and maintenance should be encouraged. Locating new agricultural buildings can also impact on landscape character and opportunities should be taken to guide site selection.

### Protect and maintain the historic field pattern

Field pattern is a prominent feature in the Limestone Village Farmlands and Plateau Pastures, reflecting the historic character of these landscapes. It is important that these field patterns are protected, particularly in the Limestone Village Farmlands where the enclosure reflects the earlier, Medieval, open field system. Where the field pattern has become fragmented through the removal of field boundaries it is important to avoid further loss and to look for opportunities to restore primary boundaries along highways, footpaths and farm and parish boundaries.

### Protect and maintain historic drystone walls

Drystone walls, and associated features such as gateposts, are an important historic feature in the limestone landscapes of the White Peak. In places the standard of walls is declining and there is a need to enhance their maintenance.

### Protect and maintain historic field barns

Traditional farm buildings are of significant value to the character of the landscape and it is important to maintain the fabric and appearance of such buildings. Isolated field barns are a special cultural feature in the White Peak, especially in the Plateau Pastures. Where they can no longer be maintained in agricultural use, careful consideration needs to be given to appropriate alternatives. Changes to the appearance of either the building or its surroundings should be avoided, especially where these are not in keeping with the rural character of the landscape. Conversion to residential use would be particularly inappropriate in a region where settlement is strongly nucleated in small villages.



Lathkill Dale © Peak District National Park Authority

#### Manage

### Manage and enhance surviving areas of natural landscapes

Extensive areas of semi-natural grassland and more localised patches of heath are landscape features of the Limestone Dales and Limestone Hills & Slopes. These areas support diverse plant and animal communities and they should be conserved as a priority. Lack of grazing has resulted in some areas reverting to scrub and woodland. There is a need to identify areas that are a priority for scrub clearance and others where retention of scrub or woodland regeneration will be more appropriate and will provide habitat diversity. Appropriate grazing and scrub control should be carried out as a priority to maintain a mosaic of diverse landscapes whilst respecting cultural heritage.

### Enhance the diversity of agricultural grassland

Many of the enclosed grasslands in the Limestone Village Farmlands and Plateau Pastures have been improved and reseeded with a consequent loss of species and visual diversity. There is a need to manage these pastures in a more sustainable way that restores or conserves species diversity whilst supporting productive agriculture. Opportunities to extend and enhance the management of unimproved pastures should also be sought, particularly in the Limestone Village Farmlands.

### Manage traditional plantation woodlands

In the Limestone Village Farmlands and Plateau Pastures there are linear or rectangular shelterbelts and groups of trees around farmsteads and settlements, and on the site of old lead mine workings. These are often not managed and suffering from dereliction. Opportunities should be sought to ensure their continuity, enhance diversity and improve woodland productivity, whilst conserving cultural heritage features. There may be opportunities to link woodland management to local wood fuel schemes and reduce reliance on traditional carbon-based energies. To mitigate new development, new plantation woodlands may be appropriate in localised areas where they maintain or enhance existing landscape character. Increased woodland cover creates areas of shelter and shade, and may be useful for mitigating the impacts of climate change.

#### Manage and enhance woodlands

Larger woodlands are only a feature in the Limestone Dales, where there is a mixture of both ancient and secondary woods. Many of these woods are neglected or would benefit from enhanced management. Some have been recently managed under the Ravine WoodLIFE Project, and further opportunities should be sought to increase diversity and improve woodland productivity whilst conserving cultural heritage features. Plantation woodlands in the Limestone Dales should be managed to create a more seminatural structure and composition, and extended through natural regeneration. There may be opportunities to link woodland management to local wood fuel schemes and reduce reliance on traditional carbon-based energies. A balance will need to be reached between woodland expansion and the retention of important open landscapes and vistas.

### Manage and enhance linear tree cover and amenity trees

Individual and groups of linear boundary trees are important landscape features in localised areas of the Limestone Plateau Pastures, e.g. along existing and historic transport routes. There is a need to manage these trees to ensure a balanced age structure whilst seeking opportunities, where appropriate, to extend and replace boundary trees. Individual or groups of trees within settlements also contribute significantly to village landscapes. These should be managed to ensure their continuity whilst addressing health and safety issues and residents' amenity.

#### Manage the network of tracks and footpaths to maximise opportunities to enjoy the landscape

The network of tracks and footpaths should be managed to maximise opportunities for healthy recreation and to enjoy the landscape. This can be achieved easily by landscape management measures such as surfacing, and by controlling inappropriate use to retain the character, cultural heritage and biodiversity interests.

# Manage the network of minor roads to maintain character and local access

The network of minor roads should be managed to maintain their local, small-scale and rural character to ensure good local access whilst discouraging inappropriate driving. Verges and cultural features should be maintained and enhanced, and the impact of signage minimised.

### Manage historic mineral landscapes

An important characteristic feature which runs throughout all landscape character types are the historic mineral workings, particularly the remains of lead working. Landscapes associated with historic mineral extraction should be retained and managed, including, where appropriate, providing interpretation of their history.

#### Plan

### Create areas of limestone grassland and heath

Since the 1940s the trend in agriculture has been towards more intensive farming methods. This trend has been especially marked on the poorer land of the Limestone Hills & Slopes. To a lesser extent this has also occurred in the Limestone Dales, where patches of formerly rough land have been converted to improved pasture. This has resulted in a gradual decline in the diversity of the region, including the loss of many cultural heritage features. There are opportunities to create extensive areas of unenclosed limestone grassland and heath, and to extend and link existing patches, particularly within the Limestone Hills & Slopes, by natural regeneration and creation. In places, there may be localised opportunities to create grassland or heathland habitats above dale brows in the Limestone Village Farmlands and Plateau Pastures areas. Expansion should not occur where this would adversely impact on cultural heritage features and historic landscapes.

### Create new native broadleaved woodland

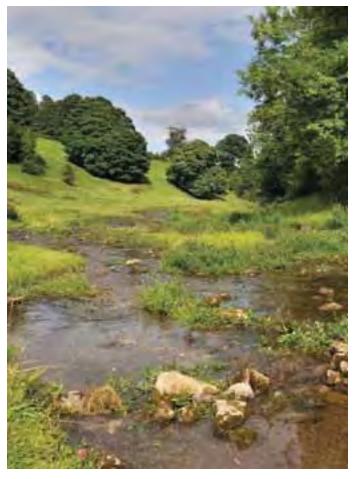
There are localised opportunities to extend woodland cover, without affecting cultural heritage and biodiversity features and historic landscapes, within the Limestone Hills & Slopes. There are opportunities to extend woodland by natural regeneration and by planting, although a balance will need to be reached between woodland expansion and the retention of limestone grassland/heath and scrub. In places there may be localised opportunities to extend Limestone Dales woodland over the dale brow into the Limestone Village Farmlands and Plateau Pastures. This should be done where it would not adversely impact on important cultural heritage features and historic landscapes. Increased woodland cover creates areas of shelter and shade and may be useful for mitigating the impacts of climate change.

### Develop appropriate landscapes from mineral workings

Parts of the White Peak have been heavily influenced by vein mineral extraction and limestone quarrying, with large active quarries in the Limestone Hills & Slopes and Limestone Plateau Pastures. Modern mineral workings should be restored to maximise visual amenity, biodiversity, recreational, educational and heritage value. The aim should be to use the land to create semi-natural landscapes, which blend into the surrounding landscape.

### Develop small-scale renewable energy for local needs

There are localised opportunities for the development of water power, solar power, local wood fuel supplies, anaerobic digestion and other renewable energy sources. Opportunities should be sought within new development and management of woodland to increase local renewable energy supply, where it would have a neutral impact on the character of the area and its component parts. Where appropriate seek positive measures to reinforce the local landscape character as part of the new development.



Bradford River, Youlgrave © Peak District National Park Authority



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