

## **APPENDIX 1**

### **PEAK DISTRICT LANDSCAPE STRATEGY 2023-32**

## **SECTION 1: INTRODUCTION**

### **Changes from the previous edition**

The spatial locations of the **Landscape Character Areas** (LCAs) and **Landscape Character Types** (LCTs) identified in the previous Landscape Strategy (2009-19) have not changed – the character descriptions have been reviewed for consistency and to reflect new knowledge and identify any changes in character that may have occurred over the last 10 years.

The guidelines for each LCA and LCT have been reviewed and amended to incorporate changes in approach and information in subsequent documents – such as the relevant Natural England National Character Area profiles, more recent government policy (such as the 25 Year Environment Plan and the Glover Review) and National Park priorities, with particular reference to our Special Qualities.

More detail has been added to the Pressures for change on the landscape, and new sections on how landscape character links to the special qualities and a ‘Vision’ for the Peak District landscapes for the next 10 years have been added.

In addition, objectives to help us achieve this vision have been identified, shown spatially in the LCTS and summarised for the LCAs.

### **Introduction**

The Peak District National Park is Britain’s first National Park. It is a treasured landscape that has been shaped and continues to evolve through the interaction of natural and cultural forces. It is a landscape that is home to local communities and is of exceptional natural beauty that provides opportunities for physical and mental wellbeing to millions of people.

At a local scale, the Peak District National Park consists of many individual landscapes, each valued for their special characteristics. These landscapes contrast with surrounding industrial and urban landscapes, enriching the lives of everyone who visits, lives and works in them. They also provide many other essential ecosystem services to support life and economic activity, including fresh water supply, carbon storage, farming and tourism.

The overall management of the National Park is guided by the **National Park Management Plan**. This Landscape Strategy sets out in more detail how certain elements of the National Park Management Plan will be delivered and guides future work to protect, manage and plan the landscapes of the Peak District.

### **Document structure**

The landscapes of the Peak District National Park have been mapped, with eight LCAs representing broad areas of landscape which share a common identity, e.g. the White Peak. Within each area a number of LCTs have been defined based upon the pattern of natural and cultural characteristics, e.g. ‘Open Moors’ or ‘Riverside Meadows’.

The following documents comprise the Landscape Strategy:

**1 Introduction and Overview:** A section that sets out the context and rationale behind the Landscape Strategy.

**2 Landscape Character Assessment:** Each of the eight **Landscape Character Areas** – including the individual **Landscape Character Types** from which they are comprised - are described, and key elements of character are identified.

- 1. White Peak**
- 2. Dark Peak**
- 3. Dark Peak Western Fringe**
- 4. Dark Peak Yorkshire Fringe**
- 5. Derbyshire Peak Fringe**
- 6. Derwent Valley**
- 7. Eastern Moors**
- 8. South West Peak**

**3 Guiding Landscape Change in the Peak District:** this section outlines our vision for landscape and outlines landscape management objectives for each LCT to achieve this vision.

#### Definitions

**Landscape Character Assessment** is the process of identifying and describing variation in the character of landscape, and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscapes distinctive. The process results in the production of a Landscape Character Assessment. The Landscape Character Assessment for the Peak District is contained in **Section 2**.

Most Landscape Character Assessments identify both **landscape character types** and **landscape character areas**. The generic characteristics of a particular landscape can be described for a landscape character type, then the uniquely distinctive features can be drawn out to inform description of landscape character areas. In this way, landscape character assessment can convey a real sense of identity and distinctiveness without unnecessary repetition. For example, the ‘open moors’ are a landscape type that occurs in a number of different areas – this landscape type shares many common features, but is uniquely and noticeably different in different locations e.g. the ‘open moors’ LCT in the Dark Peak (with its incised plateaux) are different in character to the ‘open moors’ LCT in the Eastern Moors (with its prominent edges).

**Natural beauty** is not exhaustively defined in legislation. It is also a very subjective characteristic of a landscape and ultimately involves a value judgment. It is widely accepted that the beauty of all our most cherished landscapes is in part due to human interventions such as agriculture and forestry, and it has long been the practice to include such factors in the assessment of natural beauty. Natural England has developed a list of factors that contribute to natural beauty which provides a practical framework for an evidence-base which assists in making judgments about natural beauty in a rigorous and transparent way.

This list of **factors that contribute to natural beauty** include:

- **Landscape quality:** a measure of the physical state or condition of the landscape
- **Scenic quality:** the extent to which the landscape appeals to the senses
- **Relative wildness:** the degree to which relatively wild character can be perceived in the landscape makes a particular contribution to sense of place
- **Relative tranquillity:** the degree to which relative tranquillity can be perceived in the landscape

- **Natural heritage** features: the influence of natural heritage on the perception of the natural beauty of the area. Natural heritage includes flora, fauna, geological and physiographical features
- **Cultural heritage:** the influence of cultural heritage on the perception of natural beauty of the area and the degree to which associations with particular people, artists, writers or events in history contribute to such perceptions

## Landscape and landscape change

The European Landscape Convention defines **landscape** as:

*“an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors”*

Landscape is more than just ‘the view’. It is about the relationship over time between people, place and nature. Landscape results from the way that the natural and cultural components of our environment interact together and are perceived and valued by people.

It is therefore important to understand the process of **landscape change**: what the landscape is like today, how it came to be like that and how it may change in the future.

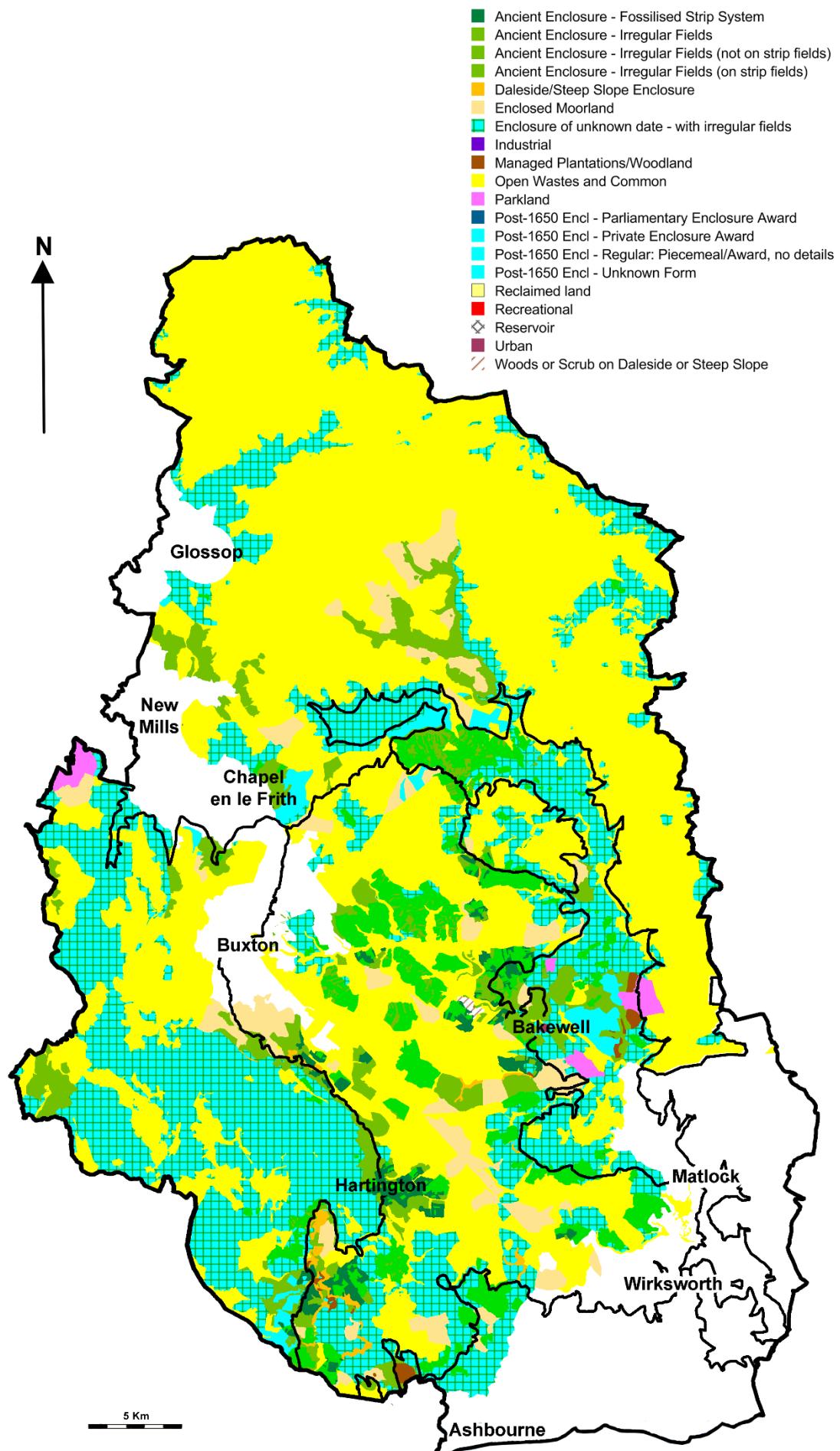
## The historic development of the Peak District landscapes

Peak District landscapes have been shaped by human activity over millennia; no part of these landscapes is truly ‘wild’ or ‘natural’, rather the land has been made, and re-made, over countless generations. In our more remote and upland landscapes the influence of past human activity may be hard to see, but the legacy of prehistoric tree clearance and use of natural resources has shaped the soils and habitats. Well-worn routes cross our moorlands and traces of activity, from prehistoric settlement and ceremony to 20<sup>th</sup> century military training, are all part of these wilder places.

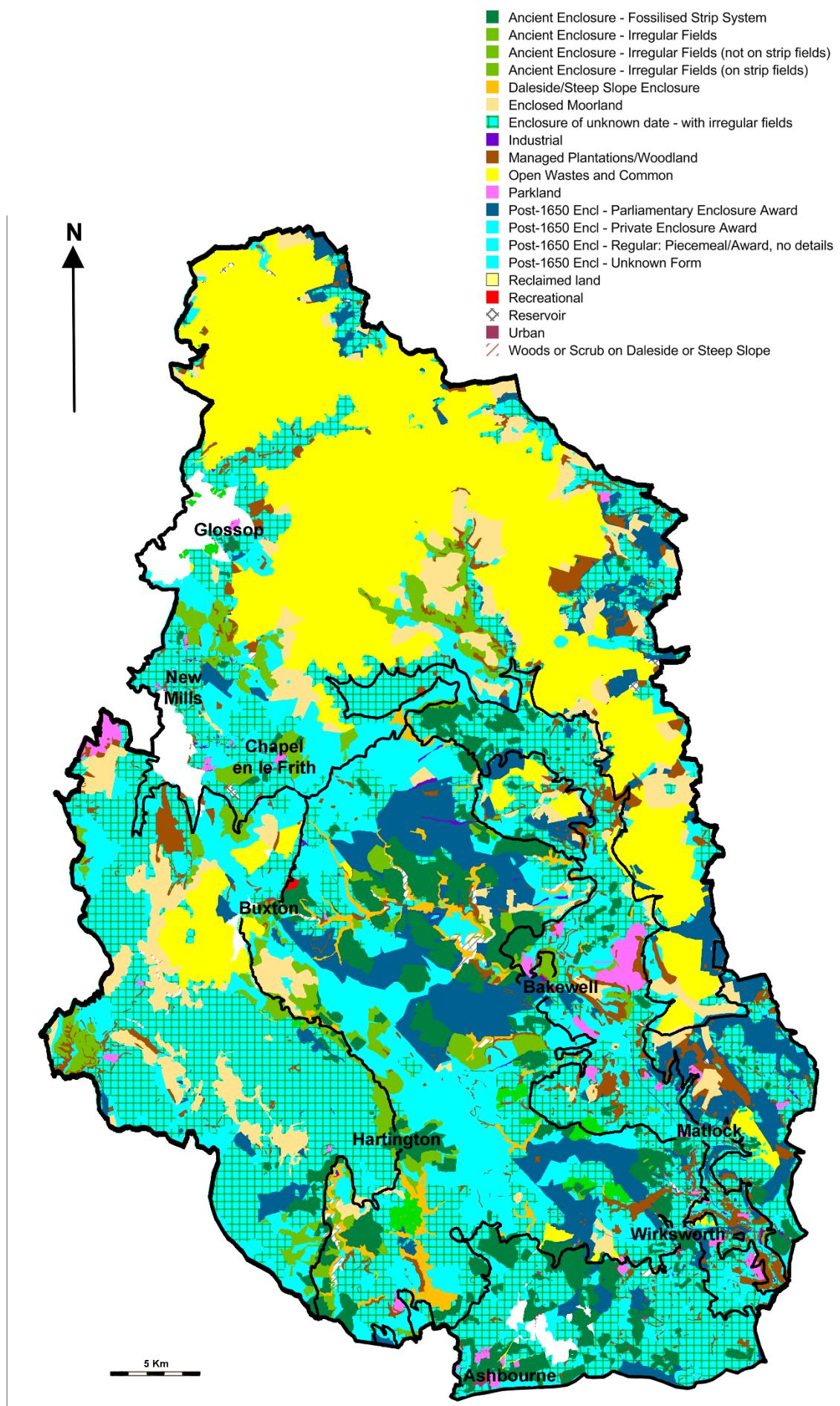
Generations of agriculture and changing patterns of land tenure and ownership are much more apparent on the lower plateau and in the dales and valleys. This evidence of deep-time human influence can be easily read in the layers and patterns of field enclosure and earthworks, the shape of settlements and paths and routeways that link them. The natural resources of the land have supported a wealth of industry, from the exploitation of minerals and stone to the harnessing of water power, resulting in some of our most iconic landscape features and built environment.

Our understanding of historic landscape change within the Peak District is further informed by detailed historic landscape characterisation that was undertaken over several years from the late 1990s. The mapping underpinning this study was fine-grained, to the level of individual field parcels; it was part of a suite of studies undertaken nationally. Historic landscape characterisation revealed the processes, patterns and connections within our landscapes, spatially and through time. Mapping change through time over such a large scale is complex; this work was structured by identifying key themes that have particularly influenced Peak District landscape development, these being settlement, agriculture, industry, archaeological vestiges and social territories. Geology, topography and soils underpin all these landscapes, and there is a strong correlation between the human and natural influences on these historic character areas.

‘Time-slice’ maps at 50-year intervals were made, from the 1600s to the present day, using a mixture of estate, tithe, enclosure award and Ordnance Survey mapping. These reflect the ‘dominant’ historic landscape character for these time periods, and comparison of these maps clearly illustrates significant landscape change that has occurred in the Peak District over the last 400 years.



Historic landscape characterisation 1750



Historic landscape characterisation 1850

The two maps shown here represent historic landscape character maps from 1750 and 1850. Although there are some data gaps for the period pre-1850, the maps clearly demonstrate the amount of landscape change during this timeframe. Of particular note is almost total transformation of 'open waste and commons' to enclosed land in the White Peak and Southwest Peak.

### **The process of landscape change**

In a National Park – which is designated for the [national](#) importance of its landscape quality and natural beauty - there must be a strong emphasis on the protection and enhancement of its landscape and natural beauty. The Landscape Strategy reflects this priority.

However, maintaining a past landscape is neither possible nor necessarily desirable. Landscapes are dynamic, subject to constant and unpreventable forces of change which result from both human practices and changing natural processes.

Climate change will lead to greater, quicker and more unprecedented changes in our landscapes.

The aim of landscape policy is not to prevent this change, but to identify and protect the key elements and aesthetic/perceptual qualities which create the '[sense of place](#)' and [special qualities](#) of the different landscapes within the Peak District, while [planning for and guiding the positive management](#) of future changes to enhance the landscape and its natural beauty.

Given this, different landscape types within the Park will require a different [blend of protection, management and planning for/guiding future change](#). Some aspects of the landscape are so highly valued that they must be protected, others should be allowed to evolve in a sustainable manner, while there will be some opportunities to introduce new elements, and new character, in some landscapes.

The landscape outcomes and outputs to achieve this blend for the Peak District National Park are included in [Section 3](#).

### **How landscape links to the 'Special Qualities' of the Park**

The Peak District National Park was designated because it exhibits a range of special qualities, which are nationally, and frequently internationally, significant. At the heart of the statutory purpose of the Peak District National Park is the need to document and clearly express these special qualities, their status and their condition.

Special qualities define what is distinctive and significant about the Peak District National Park compared with other parts of the country. Understanding these qualities helps us to plan effectively and manage the Peak District National Park in order to protect them. The special qualities are in no particular order. They should be read as an integrated set, rather than in isolation. The titles of the seven special qualities are below.

The special qualities of the Peak District National Park as outlined in the National Park Management Plan are:

- 1. Beautiful views created by contrasting landscapes and dramatic geology**
- 2. Internationally important and locally distinctive wildlife and habitats**
- 3. Undeveloped places of tranquillity and dark night skies within reach of millions**
- 4. Landscapes that tell a story of thousands of years of people, farming and industry**
- 5. Characteristic settlements with strong communities and traditions**
- 6. An inspiring space for escape, adventure, discovery and quiet reflection**
- 7. Vital benefits for millions of people that flow beyond the landscape boundary**

The landscape provides the critical foundation for all of the special qualities which in turn define what is distinctive and significant within the National Park.

## Key Policy drivers

### Statutory Purposes of the National Park

The Natural Parks and Access to the Countryside Act 1949 (as amended by the Environment Act 1995) defined the purposes of National Parks as:

- conserving and enhancing the natural beauty, wildlife and cultural heritage
- promoting opportunities for the understanding and enjoyment of their special qualities

In pursuing the above purposes, National Parks have a duty to:

- seek to foster the economic and social well-being of local communities within the National Park with regard to the statutory purposes

The Landscape Strategy contributes to the first purpose of National Parks by providing a context and direction for actions to conserve and enhance natural beauty, wildlife and cultural heritage within the Peak District National Park.

**A Green Future: Our 25 Year Environment Plan to improve the Environment** (Defra, 2018) sets out government action to help the natural world regain and retain good health. It aims to deliver cleaner air and water in our cities and rural landscapes, protect and restore threatened species and provide richer wildlife habitats. It calls for an approach to agriculture, forestry, land use and fishing that puts the environment first.

The 25 Year Environment Plan identifies six key areas, of which three are very relevant to this strategy (Using and managing land sustainably; recovering nature and enhancing the beauty of landscapes; and connecting people with the environment).

**Land use: Policies for a Net Zero UK** identifies a range of actions related to land use to reduce carbon emissions. This concludes that 20% of agricultural land should be released by 2050 for actions that reduce emissions and sequester carbon, such as afforestation and agro-forestry, increasing UK forestry cover from 13% to at least 17% by 2050 by planting around 30,000 hectares or more of broadleaf and conifer woodland each year and restoring at least 50% of upland peat.

The **Landscape review: National Parks and AONBs** ('The Glover Review') (Defra, 2019) considered whether the mechanisms by which National Parks and AONBs are managed and governed are fit for purpose in the 21st Century. It made a series of proposals, of which the following are particularly relevant to landscape management:

**Proposal 1:** National landscapes should have a renewed mission to recover and enhance nature, and be supported and held to account for delivery by a new National Landscapes Service

**Proposal 2:** The state of nature and natural capital in our national landscapes should be regularly and robustly assessed, informing the priorities for action

**Proposal 3:** Strengthened Management Plans should set clear priorities and actions for nature recovery including, but not limited to, wilder areas and the response to climate change (notably tree planting and peatland restoration). Their implementation must be backed up by stronger status in law

**Proposal 4:** National landscapes should form the backbone of Nature Recovery Networks – joining things up within and beyond their boundaries

**Proposal 5:** A central place for national landscapes in new Environmental Land Management Schemes

Government has responded and at the time of publishing this out for consultation.

**Government response to the Landscapes Review** (Defra, 2022) sets out the Governments' two priorities for National Parks: boosting biodiversity and improving public access for all. The Government's vision for protected landscapes is for them to be "A coherent national network of beautiful, nature-rich spaces that all parts of society can easily access and enjoy. Protected landscapes will support thriving local communities and economies, improve our public health and wellbeing, drive forward nature recovery and build our resilience to climate change."

**England Trees Action Plan 2021-24** (Defra, 2021) sets out policy priorities to deliver the government's ambitious tree planting commitment of planting 30,000 hectares of trees a year across the UK by 2025. The plan focuses on expanding, protecting and improving woodlands, and how trees and woodlands can connect people to nature, support the economy, combat climate change and recover biodiversity. This will ensure that trees are established and managed for the many benefits they provide for people, the economy, the climate and nature itself.

Policy actions include:

- encourage National Parks to include net zero and tree establishment targets in their statutory management plans;
- support for catchment partnerships and utility companies to deliver on the strategy; and
- targeted support for landowners to deliver woodland creation and agroforestry.

It is supported by funding to deliver trees: The **England Woodland Creation Offer** (EWCO) is a flagship new grant scheme for farmers and landowners that supports the creation of a range of woodland types and sizes, including through natural colonisation, and planting of areas of land from 1 hectare upwards. The grant will cover standard capital costs for tree planting (up to a per hectare cap), as well as rewarding farmers and landowners for providing public and/or wider environmental benefits.

The **Woodland Carbon Code** (WCC) is the UK's voluntary carbon standard for woodland creation projects. It provides reassurance about the carbon savings that woodland projects may realistically achieve. This government-led scheme provides:

- a high quality, robust voluntary carbon standard
- a transparent UK Woodland Carbon Registry
- robust science to predict and monitor carbon sequestration
- independent validation and verification of projects

**England Peat Action Plan** (Defra, 2021) sets out the government's ambition to create and deliver a new ambitious framework for peat restoration in England. Peatland restoration will enable England's peatlands not only to meet their Net Zero contribution, but also contribute to wider environmental goals.

Policy actions include:

- develop a more up to date and detailed England peat map by 2024, establishing a clear evidence base on which to build.
- fund at least 35,000 ha of peatland restoration by 2025, through the Nature for Climate Fund and other sources. The government's new Sustainable Farming Incentive, Local Nature Recovery and Landscape Recovery Schemes will provide the main delivery mechanism for peatland restoration after 2024-

- consult on banning the sale of peat and peat containing products and phase out the use of peat in horticulture.
- continue to protect our peat from fire by both phasing out managed burning and reducing the risk of wildfire.

**Nature Recovery Network policy paper (Defra, 2020)** includes an objective to support work to increase woodland cover, as part of an ambition to establish a national network of wildlife-rich places.

## Future landscapes in the Peak District

There are many possible future directions, challenges and pressures for change in the landscapes of Peak District National Park.

### What are the likely pressures for landscape change in the next 10 years?

There will be an extensive loss of ash field trees, boundary trees and woodland trees throughout the Peak District as a result of **ash dieback**. Ash trees are the most common tree in the White Peak with an estimated 8 to 9 million ash trees of various ages. Ash is the overwhelmingly dominant tree in the woodlands of the steep limestone dales, where it may comprise up to 99% of the tree cover. These limestone dales contain the largest areas of ravine woodlands in Great Britain and are some of the best examples of this type of habitat in the UK. While large-scale Ash woodlands are a characteristic feature of the White Peak, it is likely all areas of the park will be affected.

Changes in rainfall, temperature and weather patterns as a direct result of ongoing **climate change** are likely to affect a number of characteristic landscape elements, including the distribution of tree species, the composition of woodlands and habitats, the increased likelihood of drought conditions in spring/summer and increased flooding episodes as a result of intense rainfall / saturated ground in winter. With warmer and drier summers already being experienced, the water flow in limestone rivers and streams may become more seasonal. 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. Climate change may reduce the area and sustainability of peat-forming blanket bog systems within the UK and research shows that the Peak District National Park is the third most vulnerable region for this in Great Britain. The Moors are vulnerable to ongoing climate change resulting in increased drying, desiccation and erosion of the peat and associated increased risks of fire and flash flooding.

The natural environment can play a vital role in tackling the climate crisis as healthy ecosystems take up and store a significant amount of carbon in soils, sediments and vegetation. Alongside many other negative impacts, the destruction and degradation of natural habitats has resulted in the direct loss of carbon stored within them. Poorly-managed peatlands are net emitters of carbon. Restoring natural systems can start to reverse this damage at the same time as supporting and enhancing biodiversity, alongside delivering co-benefits for climate change adaptation, soil health, water management and society ([Carbon storage and sequestration by habitat: a review of the evidence NE, October 2021](#)).

Organisations such as Moors for the Future are working with landowners and land managers to manage this landscape for climate change resilience through re-wetting and other land management measures to promote sustainability and carbon storage.

**Climate change adaption and mitigation** measures (including the potential expansion of woodland creation schemes, moorland restoration and increased natural flood management) are likely to result in changes in landscape character. There is an increasing cultural and political demand for our landscapes to provide greater ‘public goods’ (such as climate change mitigation, increased biodiversity or increased floodwater retention) and these demands will likely increase pressure to change land management practices in the future.

Reducing emissions from degraded ecosystems and promoting carbon uptake, for example through restoring peatlands and planting trees, are important elements of achieving net zero. In 2019, the UK GHG emissions from the agriculture sector and land use, land use change and forestry (LULUCF) sector accounted for 12 per cent of all UK emissions. The LULUCF sector is a net source of emissions due to the high emissions associated with agricultural land use on peatlands soils (BEIS 2021b). Overall, degraded peatlands represents an increase of 16 Mt CO<sub>2</sub>e (3.5 per cent) to national emission levels ([Carbon storage and sequestration by habitat: a review of the evidence NE, October 2021](#)).

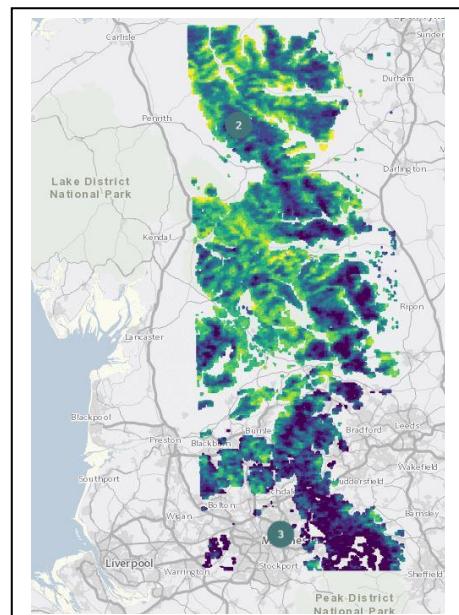
In June 2022, the Climate Change Committee warned that peat restoration rates nationally were well below the levels needed to achieve net zero by 2050, peatland under restoration management actually declined last year, and that damaged peat is the biggest source of greenhouse gas emissions from land use.

In the Dark Peak, historic and ongoing management regimes have played a key role in shaping the current landscape. Here, historic pollution and inappropriate land management practices have left species-poor grass moorland, degraded bog or monoculture heather over significant areas of our peatlands. This has resulted in a simplification in the diversity of the upland landscape mosaic and degradation of the underlying peat resource. 88% of designated moorland in the Dark Peak remains in unfavourable recovering condition.

The plan to the right illustrates the Peat Health Index of the Pennines ([Peatland Monitoring from Space, Space Climate, OS, Assimila & Durham University, 2021](#)). Healthier areas shown in yellow/green with less healthy in dark blue.

The North Pennines are more isolated than the south, resulting in fewer visitors and less pollution. Throughout history agricultural and grazing practices have been less intensive resulting in reduced damage.

The South Pennines (and northern part of the Peak District) are noticeably less healthy, shown in dark blue. Peatland degradation in this region has been caused by a combination of historic pollution from nearby cities, over-grazing and excess footfall. These factors damage the top layer of vegetation, leading to exposure of the topsoil and erosion from rain.



SOURCE: Peatland Monitoring from Space  
(Rapid Prototyping Team@Ordnance Survey)

Ongoing inappropriate management practices have implications for water quality, species management (including populations of raptors), flood risk and the ability of the moors to store carbon. There will be increasing public and political pressures for the more sustainable management of the moorland and peatland resource in the future.

Demands for **renewable energy** may again rapidly increase as fuel security becomes a key issue internationally. There will be increasing pressure on the historic built environment to include climate change adaptation and mitigation measures including coping with flash flooding, heavier rainfall and extremes of temperatures. Conversely, much recent research highlights the value of embodied energy within historic buildings, and the carbon benefits of using existing buildings rather than building anew.

Potential changes to **agricultural land management**, driven by the push to Net Zero and loss of biodiversity, is likely to have the biggest impact on the landscapes of the Peak District. Food production has been the key driver for landscape change across the landscapes of the UK, profoundly shaping historical and cultural perspectives. Agricultural change and intensification over the past 50 years has

been the most important driver of biodiversity loss. Essential components of the landscape (such as field pattern and scale, drystone walls, relic patches of heathland, unimproved grasslands, wet pastures, scrub field barns, and mature trees) are all vital for the character of the landscape and are potentially threatened by agricultural improvement and intensification.

Changes to the **agricultural support system**, including the phasing out of the Basic Payment Scheme (BPS), could potentially lead to landscape-scale change. While the detail of the new Environmental Land Management scheme has not been finalised, it is clear that agricultural support payments will move away from payments based simply on the area of land farmed, and instead be based on the principle of payment of public money for the delivery of public goods, in the form of agreed environmental outcomes and standards. How this scheme is implemented and funded could lead to significant landscape change.

For example some areas with better quality agricultural land, such as areas of the White Peak, could see pressure for intensification to replace lost income from area payments by increasing productivity. This has the potential to continue to erode characteristic features such as drystone walls. Agricultural intensification may also result in an increase in large modern agricultural buildings for housing livestock. If poorly sited and designed these buildings have the potential to result in significant harm to valued landscape character. Other areas, such as marginal grazing land in the Dark Peak and its fringes, could experience a potential reduction in intensity of use; this may provide opportunities for Local Nature Recovery, Landscape Recovery or carbon / biodiversity offsetting.

There will be a driver for **nature recovery** which would look to restore natural processes with the aim of decreasing the amount of human intervention in the landscape. Many projects within the National Park could be considered under this definition, including the work to 're-wet' areas of peatland. The challenge will be to retain the important special qualities of the landscape, including cultural heritage, while using Nature Recovery Networks as a tool in the fight against climate change and to provide solutions to help tackle the biodiversity crisis.

The proximity of major populations means that the enjoyment of the Peak District landscapes is under pressure by many different and occasionally conflicting types of **recreational use**. The level and type of use can also contribute to pressures for new routes, deterioration in the condition of routes, an increase in littering and a loss of tranquillity and sense of remoteness / wildness. Increasing vehicle numbers continues to be a major issue with high levels of vehicle use increasing damage to roads, walls, and verges, and creating an increased demand for parking. An increase in the number and size of road signs also affects the character of the area and political and economic pressures are driving plans to upgrade cross-Park routes.

The **demand for housing** could adversely affect the character of the historic settlement pattern and the relationship of settlements to the wider landscape. The conversion of agricultural buildings to domestic use could adversely 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. Conversely farming changes have led to the abandonment, degradation and loss of traditional features which contribute to the landscape, such as field barns. The Peak District has a strong association with surrounding urban areas and the demand for housing around the Park means that there will be pressure to increase residential development in the surrounding areas. This could adversely affect the landscape setting of the Park.

**Quarries** in the White Peak serve local and national demand for limestone used by the construction, cement and chemical industries. There are many landscape impacts associated with these sites, including visual intrusion, adverse effects on the historic landscapes and cultural heritage features, wildlife habitats, the transportation of products and loss of tranquillity. There is also pressure to re-work old mineral workings, extend the size of the quarries and prolong quarrying beyond the dates of current planning permissions.

## How to use this landscape strategy

When considering a possible landscape change, it is important to consider the valued characteristics of the landscape and how they will be affected by the change. The Landscape Strategy helps to raise an understanding of the character and dynamics of the different landscapes of the Peak District National Park. There are many local variations in landscape and it is essential that site-based decisions take account of local circumstances.

Decisions about landscape changes should, wherever possible, be made through discussion and partnership amongst people who live in, work in and visit an area. The steps below describe how to use information from the Landscape Strategy to inform decisions about landscape change.

- I. Use the Landscape Character Assessment map overleaf or the web link, to locate which landscape character area is relevant to the proposal for landscape change  
[www.peakdistrict.gov.uk/lcamap](http://www.peakdistrict.gov.uk/lcamap)
- II. Refer to the chapter of the Landscape Character Assessment and Landscape Strategy to gain an understanding of how the landscape has developed  
[www.peakdistrict.gov.uk/lca](http://www.peakdistrict.gov.uk/lca)
- III. Using the Landscape Strategy, consider which of the landscape objectives are relevant to the proposal for landscape change  
[www.peakdistrict.gov.uk/landscapestrategy](http://www.peakdistrict.gov.uk/landscapestrategy)
- IV. Assess the effect that the proposal will have on the landscape and, if appropriate, modify the proposal to ensure a positive contribution to landscape character and sense of place

## SECTION 2: LANDSCAPE CHARACTER DESCRIPTIONS

# The White Peak

## Introduction

The White Peak is an area of largely pastoral settled limestone uplands lying on both sides of the boundary between Derbyshire and Staffordshire at the southern end of the Pennine Hills. The term 'white' 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 distinctive deeply cut dales and gorges. Some dales contain clear rivers, streams and springs; others are dry or run water only in winter. The dale edges contain cave systems and crags that contrast strongly with the adjoining landscapes character area. It has a strong sense of place associated with its underlying geology and its influence on manmade features such as drystone walls and traditional buildings is apparent and characteristic. The dales are of significant wildlife value, particularly because of their flower-rich limestone grassland and ash woodland, and many contain clean, clear rivers which support numerous species.

The plateau is rich in archaeology, from Neolithic burial mounds and stone circles, to the remains of early lead workings, to distinctive historical landscapes with their distinctive field pattern.

## 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 limestone plateau 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 lime-loving 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, while 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.

## 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

Mininglow. 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. These sites make a significant contribution to the character of White Peak landscapes. Anglian grave mounds, including Anglian burials in Bronze Age barrows, are also characteristic of the White Peak.

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. Several of these were planned settlements with origins in the 12th and 13th centuries. Beyond the open fields, isolated farmsteads occur. While some of these farms have origins as medieval monastic granges, particularly in the higher western areas, 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. Fine examples can be seen at Chelmorton, Tideswell, Monyash, Flagg and Calton. 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 woody wastes and woody 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. There is an exceptionally high rate of survival of traditional farmsteads in the White Peak and a high proportion remain in agricultural use.

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. A few much larger kilns, related to the production of lime products on an industrial scale, are associated with quarries along the former railway lines, like those in Millers Dale.

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. Smaller exposed veins were sometimes worked by miner-farmers working smallholdings into the 19th century, and some of the field barns around villages are associated with these smallholdings.

Research has defined extensive areas of High Priority Leadworking Sites & Landscapes, particularly around Castleton, Peak Forest, Miler's Dale, Longstone Moor, Youlgrave, Winster and Brassington.

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. Much of the plateau woodland was cleared by the 17th century to supply the lead mines. These industrial features are very important aspects of the White Peak landscape character.

The extraction of semi-precious stone such as Blue John has left only modest surfaces features, but the complex underground landscapes associated with these activities can be appreciated in the show caves that now form key visitor destinations.

In the 1600 and 1700s extensive areas of the White Peak were covered with wood pasture. This was gradually cleared, giving us the modern agricultural landscape with limited tree cover that we see today.

### 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 nucleated 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.

There is a strong sense of enclosure and visual containment in the Dales, which contrasts with the more open nature of the plateau with its extensive views. The plateau tends to be a simpler landscape with its relatively uniform and regular pastoral fields and boundaries, with the Dales and Hills and Slopes being more complex with a more irregular, wooded feel. The settled nature of the Limestone Plateau and the Village Farmlands also contrasts with the more unsettled Dales and Hills and Slopes. Away from the road corridors, this is a tranquil landscape. The Dales and Hills and Slopes have a sense of remoteness and wildness.

The extensive remains of lead and mineral working, both above and below ground, are an extremely important historic aspect of the White Peak landscape.

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 dales**

### Limestone village farmlands LCT

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

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.

## **Key characteristics**

- A gently undulating plateau of pastoral farmland enclosed by drystone walls made from limestone with characteristic historic elements such as field dewponds and field barns
- A repeating pattern of narrow strip fields originating from medieval open fields with scattered boundary trees and tree groups around buildings
- Discrete limestone villages and clusters of stone dwellings
- A landscape of historic lead working including relict mine shafts and associated lead mining remains

## **Geology, landform and soils**

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.

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.

## **Species and habitats**

As a result of the long history of continual farming in close proximity to the village there is little surviving semi-natural habitat within this settled pastoral landscape.

## **Tree cover**

Due to historic and continuing agricultural pressures tree cover is largely restricted to small groups of trees and a scattering of trees along boundaries and around village margins, often creating quite intimate rural scenes. Elsewhere the landscape is generally 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 mining features are extensive, for example around Miller's Dale, Monsal Dale and Upper Town. Small scale limestone quarries and limekilns are also found in this area.

## **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 prominent element in this landscape, creating a strong sense of scale and visual unity.

## **Settlement, buildings and monuments**

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. Some deserted medieval settlement and field systems are present in this area. 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, access and recreation

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 LCT

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.

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 Fair field to Calver, and there are several smaller areas, such as Calton Moor to the south.

### Key characteristics

- A rolling upland plateau of pastoral farmland enclosed by limestone walls with open views to surrounding higher ground
- A regular pattern of small to medium sized rectangular fields with discrete small tree groups and shelter belts
- Isolated stone farmsteads and field barns
- Localised field dewponds and farm limekilns, medieval granges surrounded by older fields,
- relict lead mining and quarrying remains and prehistoric monuments, often on hilltops

### Geology, landform and soils

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 and has shallow free-draining soils.

### Species and habitats

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 due to agricultural practices 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 for example north of Monyash and south of Winster. 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, buildings and monuments

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 earlier 19th centuries. There are also medieval granges, although today's buildings are mostly later rebuilds from the 17th century onwards. This area contains concentrations of prehistoric monuments including the henges at Arbor Low and the Bull Ring, Neolithic chambered tombs and prominent hilltop Bronze Age round barrows. Prehistoric activity is also evidenced through flint scatters in the ploughsoil, and field systems and some earthworks of the Romano-British Period, as at Roystone Grange.

### Transport, access and recreation

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. The High Peak Trail, formerly the Cromford and High Peak Railway, crosses the central part of this landscape character type. Dramatic stone-built embankments form some of the area's most striking landscape features.

## Limestone hills & slopes LCT

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.

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.

### Key characteristics

- High, undulating, and in places steeply sloping topography with 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 with occasional groups and belts of trees
- Prehistoric monuments, often on hilltops and exceptional relict lead mining landscapes
- Wide, iconic open views to distant skylines

## **Geology, landform and soils**

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 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.

## **Species and habitats**

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.

## **Tree cover**

Tree cover is relatively limited in this open landscape. In some places, away from grazing pressures, areas of scrub can be found and in more sheltered areas with deeper soils, there are small plantations and tree groups associated with farmsteads.

## **Land use**

For the most part this is a pastoral landscape with improved grassland and localised hay meadows. 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 many places these features are extensive and well preserved. 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 Dirlow Rake were enclosed using long ruler- straight boundaries as early as 1691. There are 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. In several places well-preserved field systems of Romano-British date underlay the medieval and later agricultural landscape.

## **Settlement, buildings and monuments**

This is a sparsely settled landscape with only occasional, large, isolated stone farmsteads, many of which were first established in the 18<sup>th</sup> or 19<sup>th</sup> centuries. Some areas contain higher concentrations of outfarms and field barns. 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, particularly barrows, which are often prominently sited on the highest hilltops. Flint scatters within ploughsoils show concentrations of prehistoric activity. The copper mines at Ecton have been worked from the Bronze Age period onwards.

## **Transport, access and recreation**

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 LCT**

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. By contrast, the northern dales contain extensive historic mineral workings, transport routes and water-powered industries.

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.

## **Key characteristics**

- Steep sided limestone dales with craggy outcrops, cliffs and scree slopes
- Extensive patches of limestone grassland forming a landscape mosaic with 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) and use of water power

## **Geology, landform and soils**

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 channels. The smaller dales tend either to be dry, or have only winterbourne streams, as much summer rainfall percolates through to the bedrock.

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.

## **Species and habitats**

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.

### Tree cover

Tree and scrub cover is a key feature of the landscape mosaic of the dales. 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.

### Enclosure

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

### Settlement, buildings and monuments

Human habitation is not a feature of this landscape owing to the topographical inaccessibility of the limestone dales, although prehistoric activity is attested by lithic scatters, and archaeological cave deposits. In parts of the Wye Valley, Lathkill Dale, Monsal Dale and the Via Gellia the remains of past lead mining and quarrying are important features.

The importance of historic limestone working and the production of lime products is particularly clear in Monsal Dale and Miller's Dale, and impressive industrial limekilns in the valley demonstrate the critical role of the railway in this industry. The harnessing of water power has left traces such as weirs, mill ponds and channels, including smaller-scale workings such as the corn mill at Wetton Mill, Ashford Bobbin Mill and the lead processing and other mills in the Via Gellia.

While relatively unsettled today, traces of medieval settlement and field systems are found in some dales, sometimes focussed upon the sites of medieval granges.

### Transport, access and recreation

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, Millers Dale and the Via Gellia. These are usually late 17<sup>th</sup> to early 19<sup>th</sup> 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-19<sup>th</sup> century construction of railways, although some routes are no longer in use and form popular walking routes such as the Monsal Trail. The Monsal Head railway viaduct now forms one of the most iconic views in the National Park.

## The Dark Peak

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

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

### **Physical influences**

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

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

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

### **Ecological influences**

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

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

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

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

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

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

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

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

## Human influences

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

The deep valleys which cut into the Dark Peak have been used for agriculture from later prehistory to the present. The settlement pattern is very dispersed, with small hamlets and many farmsteads of medieval origin. In the last few hundred years the land use within enclosed fields around each farmstead has been mainly pastoral. The limited arable farming practices on the more favourable soils has declined significantly in the 20th century, but there is an exceptionally high survival of traditional farmsteads. The uplands have long been used for rough sheep grazing which, where prolonged, has reduced the dwarf shrub heath cover, replacing it with cottongrass bog or grass. Where management allows, the semi-natural heather moorland give rise to the summer purple moorland tops typical of the Dark Peak.

Before the widespread availability of coal, the uplands provided fuel in the form of peat. Once, peat cutting on the high wastes and commons was a communal right, but when the land was privately owned, landowners gave the right to cut peat, usually from a designated location, to tenants. Domestic scale cutting often took place above farm properties and was of a much smaller scale. This activity was carried

out on the moorland tops near to settlements in the lower valleys and the results are still visible in the landscape such as above both Edale and the Upper Derwent Valleys. Tracks and sled runs to peat cutting sites are also still visible in the landscape. Heather and bracken were also cut for bedding roofing and fodder.

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

Some routes have been formalised into roads while others have become relict features in the landscape. Later routes became more innovative, such as the Woodhead Railway tunnels which connected Manchester and Sheffield by rail; these tunnels now carry electricity transmission lines and the Trans Pennine Trail follows the route of the redundant railway.

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

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

The Dark Peak also has a well-known role in the development of rock climbing as an accessible sport to all social classes. Prior to the 1950s rock climbing was a socially elite pastime with expensive gear and difficulties accessing rock faces. Climbers such as Joe Brown and other working class men from Manchester and Sheffield developed a new, less formal approach to climbing with a focus on the Dark Peak and the Eastern Moors. Eventually these climbers evolved the sport, developing gear and climbing styles that are still used today.

The Dark Peak offers opportunities for solitude, tranquillity, and appreciation of wild beauty that the surrounding, more settled landscapes cannot. This is illustrated by the types of recreational access enjoyed and in particular the freedom to roam on the open moorlands. These characteristics and the historic context and sense of place from the moorland access campaigns and the former trade routes are highly valued characteristics by some visitors, providing an important cultural and recreational resource and experience.

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

## Sense of place

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

The moorland tops appear dark due to the weathered gritstone bedrock, exposed and blackened in places, which tones with the dark oranges and browns of heather and grasses. During the summer months extensive tracts of blanket bog on the high moors are dominated by the waving white heads of cottongrasses, which give rise to distinctive place names such as 'Featherbed Moss', while in the late summer the lower moorlands become bright and vibrant when the purple heather flowers over extensive tracts of land.

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

The enclosed fields and increased tree cover make the landscape more varied in both texture and colour. Moorland vegetation such as bilberry remains along field boundaries, verges and small patches of relict habitat.

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

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

- **Open moors**
- **Moorland slopes & cloughs**
- **Enclosed gritstone upland**
- **Upper valley pastures**
- **Reservoir valleys with woodland**

## Open moors LCT

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

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

### Key characteristics

- An unsettled and seemingly-wild landscape with vast panoramas over surrounding hills and lower ground. The lack of obvious man-made features contributes to the sense of remoteness and tranquillity.
- An undulating high gritstone plateau with localised rock outcrops and boulders, in the form of rocky edges and tors and incised cloughs

- Thick deposits of peat with unenclosed heather and grass moorland and extensive areas of blanket bog and rough grazing land
- Significant clusters of prehistoric lithic scatters on the northern moors

## **Geology, landform and soils**

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

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

## **Habitats and species**

Most of the open moorland is underlain by thick deposits of blanket peat. These have developed during the last 10,000 years, with the maximum growth during a warmer period 8,000 to 6,500 years ago, and are, for the most part, between 2 and 4 metres thick. Much of this landscape is covered by blanket bog dominated by cottongrass or a mixture of cottongrass and dwarf shrubs (heather, bilberry and crowberry), which supports northern species such as cloudberry locally. Shallow bog pools occur sporadically, but gullying of the peat is extensive across much of the blanket bog, resulting in drainage and erosion.

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

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

## **Tree cover**

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

## **Land use**

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

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

## **Enclosure**

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

## **Settlement, buildings and monuments**

This is an unsettled landscape with built features existing only locally. There are occasional grouse butts and shooting cabins, and isolated farm buildings built from local gritstone. There are significant clusters of Mesolithic and Neolithic flint scatters on the northern moors, such as Rocher Moss and Meltham Moor. Lithics on early ground surfaces are sometimes exposed at the very edges of the open moors, where the peat is more prone to erosion. There are occasional other features such as the War Memorials on top of Pots and Pans Hill in Saddleworth, Lady Cross, a medieval monastic boundary marker close to Round Hill, and prehistoric barrows as at Kinder Low. Several military aircraft crash sites are located on the open moors.

## **Transport, access and recreation**

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

## **Moorland slopes & cloughs LCT**

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

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

### **Key characteristics**

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

### **Geology, landform and soils**

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

Landslips have long occurred in this landscape type: at the end of the late Devensian glacial period, as ice was retreating, glacial modification and over-steepened slopes resulted in landslips. Other causes, more common recently, are water over-saturation that reduces the rock's shear strength and the location of high mass strength rocks, such as the gritstone, overlying weaker rock layers such as shales. Landslips are

a local feature here and vary in scale; the landslip at Alport Castles is over 1km in extent: the largest inland slip in England. Mam Tor is known as the Shivering Mountain because of its repeated landslips. Localised peat erosion can occur due to management practices.

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

### Habitats and species

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

Where the upper slopes form edges to the moorland and on the sides of steep cloughs, there are frequent extensive amounts of bare rock and scree, which can provide for a range of valuable habitats. Some cloughs support fern banks including beech fern and oak fern, while on land that is inaccessible to grazing, such as ledges, tall vegetation species such as goldenrod may flourish.

The interleaving of permeable gritstone with less permeable shales gives rise to numerous springs and flushes on slopes and clough sides at the junction of the rock types. These often support a particularly diverse flora and insect fauna.

### Tree cover

Historic management practices have reduced tree cover in this landscape to low levels. However, remnant woodlands, scattered trees and patches of scrub often occur within cloughs, while occasional small plantation woodlands can sometimes be found on moorland slopes. Clough woodlands can be wet or dry. Wetter woods tend to be associated with alder, or birch and willow, whereas the drier woodlands are dominated by sessile oak and pedunculate oak, with birch and holly, or hazel in the under storey. Localised 20th century conifer plantations occur in this landscape character type.

### Land use

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

### Enclosure

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

### Settlement, buildings and monuments

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

This is a very sparsely settled landscape with occasional isolated gritstone farmsteads and cottages with stone slate roofs. Some of these farmsteads date from the medieval period but the buildings have been

subsequently rebuilt. There are also occasional field barns and stock pens within the landscape, associated with sheep farming and constructed from the local gritstone. There are traces of relict agricultural holdings with sites of now demolished farm buildings and sheepfolds.

### **Transport, access and recreation**

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

### **Enclosed gritstone upland LCT**

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

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

### **Key characteristics**

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

### **Geology, landform and soils**

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

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

### **Habitats and species**

Although most of the land is now improved to varying degrees for pasture, many patches of semi-natural vegetation still exist along verges, on steeper slopes and even as isolated patches within some fields. Heath-associated species, such as heather, bilberry and gorse are a common feature in many places. Where the soils are wetter species such as purple moor grass tend to be more common and there are some patches of soft rush, which often support small populations of breeding birds such as snipe.

### **Tree cover**

Historic and ongoing management practices have reduced tree cover in this landscape to low levels. However, there are occasional tree groups, generally adjacent to farmsteads and planted to create shelter around properties, using broadleaved species such as oak, ash and sycamore. There are small

remnant broadleaved woodlands and scattered trees, often in cloughs and along some field boundaries. There are also some shelterbelts and occasional blocks of 19th or 20th century coniferous woodland.

### Land use

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

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

### Enclosure

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

### Settlement, buildings and monuments

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

### Transport, access and recreation

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

### Upper valley pastures LCT

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

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

### Key characteristics

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

### Geology, landform and soils

This is a moderate to steeply sloping valley bottom landscape where rivers have eroded through the Millstone Grit creating an undulating topography in the underlying shale. Further variation is created by

small streams which dissect the main valleys as they drain the surrounding high moors. In places landslips on higher ground have created a very distinctive hummocky landform which becomes flatter towards the valley bottom.

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

### Habitats and species

For the most part this is a moderately intensively farmed pastoral landscape with some ecologically interesting grasslands, particularly in the Edale valley. Biodiversity value is found mainly in surviving unimproved pastures and hay meadows, which can provide a range of flora such as bird's foot trefoil and common cat's ear. On less well drained land, where the ground is wetter, the pastures often support soft rush and can provide a breeding ground for wading birds.

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

### Tree cover

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

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

### Land use

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

Land is managed to maintain water quality around Kinder reservoir. These valleys are also popular for walking, often used as starting locations for walks on the moors. The popular Pennine Way walking route begins in the Edale Valley and leads to the famous Jacob's Ladder, an old packhorse route, up onto the plateau above.

### Enclosure

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

### Settlement, buildings and monuments

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

Other more scattered but post-medieval farmsteads are also common, particularly on the less favourable north-facing slope of the valley. The Woodlands Valley and the Kinder Valley both have a similar

dispersed settlement pattern with farmsteads and cottages located along the valley bottoms and lower slopes. Some of these are known to have medieval origins and appear to have grown up as individual farms. There is a Victorian nucleated settlement in the centre of the valley which grew up in association with the creation of the railway station and Edale Mill.

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

### **Transport, access and recreation**

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

## **Reservoir valleys with woodland LCT**

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

This landscape occurs in Longdendale and the Upper Derwent Valley.

### **Key characteristics**

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

### **Geology, landform and soils**

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

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

### **Habitats and species**

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

### **Tree cover**

This landscape is extensively wooded, with large areas of conifer plantations. Some of the plantations were planted on the site of ancient woodlands that were cleared of native trees. Patches of ancient semi-

natural woodland are now linked by the areas of plantation woodland to create a heavily wooded landscape.

### Land use

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

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

### Enclosure

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

### Settlement, buildings and monuments

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

### Transport, access and recreation

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

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

# The Dark Peak Western Fringe

## Introduction

The Dark Peak Western Fringe comprises the sloping and lower lying landscapes of the Goyt, Etherow and Tame valleys. It contrasts with the Dark Peak in that, although it includes enclosed moorland landscapes, it is more settled and has been cultivated to a much greater degree than is the case in the adjoining wilder uplands. Equally, the early industrial character of the former mill settlements is very different from that of the adjoining coalfields in the Manchester Pennine Fringe. Mills are a prominent feature of this area exploiting local power sources: firstly employing the streams running off the Dark Peak for power and from the 18th century using some of the coal mined locally.

## Physical influences

As in the other areas surrounding the Dark Peak, the physical structure of the Dark Peak Western Fringe is strongly influenced by the underlying geology. This comprises a sequence of shales and gritstones belonging to the Millstone Grit series, which have been eroded in different ways to produce a distinctly undulating topography. The upstanding, higher ground tends to be formed from gritstone, while the valleys and other lower lying areas are cut into the underlying, softer shales. These beds then pass beneath the more rolling Lancashire Coal Measures that extend from the west towards the lower slopes of the Dark Peak particularly between Glossop and Whaley Bridge. The Coal Measures consist of interbedded grey shales, siltstones and sandstones with occasional beds of coal and ironstone.

The steep slopes of the adjoining Dark Peak give way to lower lying valleys and adjoining floodplains in the valley bottoms of the Dark Peak Western Fringe. Deep and narrow, steep sided cloughs, often a characteristic feature within this sloping ground, carry water that has drained off the moorland summits down into larger rivers, such as the Goyt, Tame and Etherow.

Glaciation had a strong impact on the form of this landscape. During the last ice age, the Peak District was a peri-glacial tundra with snowfields and frozen ground. The Peak District Western Fringe was influenced by this glaciation with the erosion of ice stream valleys and the deposition of significant deposits of glacial till. During the peri-glacial conditions wind eroded the Millstone Grit creating a dust, known as loess, which was deposited across the Peak District.

## Ecological influences

For the most part the soils of the Dark Peak Western Fringe are seasonally waterlogged, gleyed soils found over the shale beds on lower lying land, where they are used for improved permanent pasture. These are often associated with deep, loamy and clayey soils that have developed on glacial deposits and in places on alluvial deposits on the valley floors. On the upper slopes of the gritstone hills shallow, in places impoverished, mineral soils can be found which tend to produce agriculturally poor pasture land containing occasional rough patches and remnant moorland vegetation that reflect the original semi-natural character of these landscapes. On hill summits such soils are often impoverished and have peaty topsoils, giving rise to patches of enclosed acid grassland and moor often used for rough grazing.

On the enclosed moorland heather dominates, with varying amounts of bilberry, cowberry and crowberry. These upland heaths support birds such as red grouse, meadow pipit and curlew. Where there has been prolonged grazing acid grassland has replaced the heathland. Associated areas of bracken are important in places for breeding whinchat. Acid flushes have developed locally, with carpets of sphagnum moss, sedges and rushes.

Fast flowing streams have created deeply incised cloughs and valleys whose sides are clothed with acid grassland and bracken, with occasional relic heathland vegetation such as bilberry. The numerous flushes and springs arising at the junctions of gritstone and shale on clough sides support particularly botanically rich communities whose species composition varies according to water chemistry. The banks of clough streams and upland rivers support small numbers of grey wagtail, while wet streamside shale crags are

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

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

### **Human influences**

The Dark Peak is renowned for its remote, isolated moorland summits, however, the lowlands of the Western Fringe have been settled for a long time: land has been cultivated for agriculture, mainly pastoral land uses with some small scale quarrying and coal mining.

Fast flowing rivers have been used as both water supply and to power early industry.

There is a Roman fort at Melandra Castle, to the north of Gamesley, and no doubt there were Romano-British farmsteads scattered in the valley around, but little archaeological evidence for these has been found. During medieval times, much of the Dark Peak Western Fringe was managed as a Royal Hunting Forest with severe penalties for trespass or poaching. The Royal Forest of the Peak ran through the southern parts of this fringe area, from the Etherow southwards and the Goyt eastwards, and was managed as a hunting forest with Chapel-en-le-Frith as one of the administration centres for this. Indeed, the name means Chapel in the Forest and reflects the building of a chapel by foresters during the medieval period.

The upper slopes of the landscape are settled with occasional, dispersed gritstone farmsteads associated with pasturing, with improved pastures and enclosure, while small hamlets are found further down in the less exposed, but wetter, valleys. Dispersed farmsteads were common here prior to industrialisation and are sometimes located close to coal mining and small scale quarrying which would presumably have played a part in the local economy before the 19th century. Relatively large scale quarrying was carried out on the moorland and slopes, such as at Chinley Churn and Cown Edge, while coal mining was widely carried out in the area, from Saddleworth southwards through Glossop and New Mills to Whaley Bridge, with particularly important evidence surviving from early mines at Ollersett Moor.

The river valleys, that higher up the slopes consist of relatively undisturbed clough heads, widen out into land that has long been managed for both stock pasturing, settlement and industry. The valley slopes and bottoms have been used as a resource for grazing and stock rearing. The fast flowing rivers provided power and water for, at first small scale and then larger, industrial sites. Such was the case around Uppermill and New Mills where, over time, many mills were eventually located along the riverbanks and included cotton mills, woollen mills, dyeing and bleaching works, paper mills and print works. As urban populations surrounding the Dark Peak increased, people settled mainly around the lower lying land of the valleys near the larger mills, with hamlets growing into towns associated with the growing industry. For example, Glossop originated as one of several closely-spaced but small medieval hamlets with open fields which were partly subsumed in the 19th century by urban development. Routes cross over the moorland through this fringe landscape and other routes run along the valleys, joining up fringe settlements and providing access to wider markets outside of the area.

Although these lower lying areas are on the fringe of the Dark Peak, the development which has taken place here is closely linked to the opportunities provided by the Dark Peak landscapes, for instance

building materials from gritstone, and water power. The adjacent coal measures meant that these settlements were ideally placed to exploit two resources: the water running off the Dark Peak and the coal that existed around the mills and in mines further west in the lowlands, particularly to the north-west around Bolton and Oldham.

This location, at the interface between two significant topographical regions, gives these fringe landscapes a unique character different from those further east within the Dark Peak and those further west.

### Sense of place

Some areas of remote moorland in the Dark Peak Western Fringe are very picturesque, such as Dovestones. The landscape becomes more enclosed and pastoral away from the remote moorland tops of the Dark Peak. Within the National Park the landscape remains peaceful but the sense of remoteness and isolation diminishes as the landscape becomes more intimate and settled with gritstone walled enclosures and isolated gritstone farmsteads, often with associated field barns and sheep pens. The improved fields and level of tree cover increase towards the valley bottoms creating variety in the landscape and intermingling with gritstone buildings that become more dominant towards the main areas of settlement. Relict patches of moorland vegetation, such as bilberry, is often found along field boundaries and verges.

In places the landscape remains unsettled, particularly on steeper ground and up into the narrow, steep cloughs where access is limited. These locations can be important habitats for nesting birds and other species.

Settlements tend to be larger here than in the core of the Dark Peak, with several small urban centres including Glossop, Stalybridge and New Mills. These settlements, often with gritstone terraced properties are strongly associated with past industry, and include old mills and remnant industrial sites. Although these settlements often have an industrial association they also have a strong link with the Dark Peak. Long distance views west, towards these settlements, and Manchester and the Cheshire Plain are important.

The Dark Peak Western Fringe can be sub-divided into a number of different landscape types, each of which is characterised by a particular aspect of the wider Dark Peak Western Fringe character. They have been defined by their broadly repeating patterns of natural elements and cultural factors:

- **Moorland slopes and cloughs**
- **Enclosed gritstone uplands**
- **Valley pastures with industry**
- **Riverside meadows**

### Moorland slopes & cloughs LCT

Steep slopes and cloughs rising to precipitous gritstone edges and scree slopes, with rough grassland and heather moor grazed by sheep. This is largely an exposed, unsettled landscape with views over lower ground.

This landscape occurs in one location within the Dark Peak Western Fringe, in the west of the area, along Coombes Edge and around Long Clough.

### Key characteristics

- Steep slopes and cloughs, in places rising to precipitous edges with prominent gritstone outcrops, boulders and scree slopes
- Rough acid grassland and heather moorland grazed by sheep

- Exposed views over lower ground, sometimes limited by clough sides

## **Geology, landform and soils**

This is a sloping landscape, strongly influenced by the underlying Millstone Grit which forms the upper slopes fringing the moorland summits. The resulting landform creates a sense of elevation with panoramic views over surrounding countryside and settlements. The slopes were eroded by freeze-thaw processes, land slips and down washing from streams. There are some outcrops of gritstone, on steeper slopes most notably where it forms distinct edges with precipitous rock faces as at Coombes Edge.

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

## **Species and habitats**

This is a landscape with patches of semi-natural vegetation with a mixture of heather and bilberry, and acid grassland where mat grass and purple moor grasses are dominant.

Upper slopes and steep clough sides have gritstone outcrops. Some support fern banks while on land that is inaccessible to grazing, such as ledges, tall vegetation species such can flourish.

## **Tree cover**

Grazing on these moorland slopes has restricted tree regeneration, resulting in low levels of tree cover over much of the area. However, scattered trees and patches of scrub occur within cloughs and occasional small coniferous plantation woodlands are found on moorland slopes.

## **Land use**

Owing to its elevation and poor quality soils, this is a marginal agricultural landscape used primarily as rough grazing for sheep; there are some improved pastures but these tend to be small and localised. The slopes support a range of recreation such as walking on footpaths and bridleways that cross this character type, particularly along Coombes Edge.

## **Enclosure**

Not all of this landscape character type is enclosed reflecting its steep nature. Of the areas that are enclosed, their date is uncertain as there is no map coverage before the 19th century. Fields are generally irregular in shape and enclosed by gritstone drystone walls.

## **Settlement, buildings and monuments**

This is a very sparsely settled landscape with only occasional isolated gritstone farmsteads with stone tile roofs on lower slopes.

## **Transport, access and recreation**

The moorland slopes and cloughs are largely inaccessible to transport with the exception of routes that cross over the moors, such as Monks Road, which may have Roman origins. There are smaller tracks throughout the landscape mainly providing access to farms. Braided hollow-ways provide evidence that this landscape was once more widely travelled through. There are pathways and bridleways, often following the contours, particularly around the western facing slopes. Some of this landscape character type is access land.

## Enclosed gritstone upland LCT

An enclosed upland landscape associated with high, gently undulating upland tops. This is a landscape of isolated stone farmsteads, straight roads and regular fields enclosed by drystone walls. Patches of remnant moorland vegetation are a feature in places within this landscape character type.

This landscape occurs on the edge of the moorland core, on the western margin of the Peak District, on the uplands centred on New Mills and to the west of Hayfield.

### Key characteristics

- High rolling upland with some steeper slopes with localised pockets of peat which support remnant patches of rough land with bracken and gorse, some heather and bilberry
- Regular pattern of medium to large pastoral fields and rough grazing enclosed by gritstone walls
- Straight roads with wide verges of grass and, in some places, heather
- Scattered gritstone farmsteads with stone slate roofs and some relict quarry and coal mining sites. Trees often grouped around farmsteads

### Geology, landform and soils

This landscape is associated with a high, gently undulating gritstone upland top. The underlying bedrock is Millstone Grit, which is often exposed as rock outcrops particularly on the steeper slopes where it sometimes forms small gritstone edges.

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

### Species and habitats

Although most of the land is now improved for pasture, many patches of semi-natural vegetation still exist along verges, on steeper slopes and even as isolated patches within some fields. There is moorland vegetation in some locations, in places on Marley Moor. Heath-associated species, such as heather, bilberry and gorse, are a common feature in places. Where the soils are wetter, species such as purple moor grass tend to be more common. There are some patches of soft rush on the wetter soils, which often support small populations of breeding birds such as snipe.

### Tree cover

Sheep grazing has restricted tree growth and regeneration so tree cover is limited in this landscape. However, there are occasional tree groups of mainly broadleaved species such as oak, ash and sycamore. Tree groups are planted adjacent to some farmsteads to create shelter around properties. There are some shelterbelts and occasional blocks of 19th or 20th century coniferous plantation woodland within this type.

### Land use

This is a landscape of mostly improved permanent pasture with sheep and cattle grazing and some rough grazing. There are some reseeded grass leys and very occasional arable fields. However, the soils are mostly nutrient poor. Acid grassland exists where the soils have not been improved and some fields are dominated by rushes or are reverting to moorland habitats providing ecological interest.

Historically, there was quarrying and mining associated with this landscape. At Chinley Churn there are particularly extensive relict quarries where surface quarrying and underground stone extraction was carried out; the Cracken Edge workings are a fine example, and remains of structures and machinery, winding inclines and other features are still in place. Historically, the landscape would also have supported coal mining as around Whaley Moor, Aspenshaw and Ludworth Intakes. There are extensive mining remains at Ollersett Moor dating from the early 18th to late 19th centuries.

## **Enclosure**

The land here was enclosed from upland waste and commons. The date of the enclosure in this landscape varies with some ancient, irregular enclosure that predates mid 17th century historical mapping, as for example to the north-west of Hayfield. Later enclosure is more common. Some was probably enclosed prior to the late 18th century as part of private agreements, other areas could well have been enclosed as late as the 19th century.

Drystone gritstone walls are the prominent enclosing element, particularly on higher ground, although in some places enclosure is created by hedgerows and fencing; this tends to occur towards the fringes of the landscape and not on the higher ground.

## **Settlement, buildings and monuments**

Settlement tends to consist of isolated gritstone farmsteads with stone slate roofs, often dating from the 18<sup>th</sup> century onwards, when much of this landscape was enclosed. Settlements often use the natural land form for weather protection. Higher up, towards where the enclosure gives way to the open moorland, the landscape is largely unsettled.

## **Transport, access and recreation**

This is a landscape with limited vehicular access with a few roads and tracks associated with farmsteads. Within this landscape type there are older routes and names such as Monks Road suggest historical context associated with landowners such as those at medieval abbeys. The Cown Edge Way may have early origins, and an Anglian cross and waymarker flank this route near Ludworth Mor. There is a network of footpaths through this landscape including the Pennine Bridleway and some small areas of access land.

## **Valley pastures with industry LCT**

A small scale, settled pastoral landscape on undulating lower valley slopes. There are filtered views through scattered hedgerows and dense streamside trees. Stone built terraced housing on lower slopes is associated with historic mills. There are dispersed gritstone farmsteads as well as small clusters of farms with associated dwellings. Pastoral farmland is bounded by hedgerows and drystone walls.

**This landscape character type exists as a large area running from the north to the south of the Dark Peak Western Fringe running from Bleak Hey to Stalybridge and from Arnfield to Chapel-en-le-Frith.**

## **Key characteristics**

- A low lying undulating valley topography, rising towards adjacent higher ground
- Network of streams and localised damp hollows with millponds and leats
- Small to medium sized pastoral fields enclosed by hedgerows and drystone walls
- Trees are dense along watercourses and scattered along hedgerows and around settlements
- Dispersed settlement with isolated farmsteads and small clusters of dwellings
- Stone built terraced housing associated with historic mills
- Narrow winding lanes, sunken on slopes

## **Geology, landform and soils**

An undulating lower valley floor landscape with rounded hills and shallow to steep valley sides, incised by steeper cloughs in places. The underlying geology is of interbedded Millstone Grit combined with shales and siltstones. To the south of the area, below Glossop and westwards, the coal measures influence the underlying geology.

The coal measures consist of interbedded grey shales, siltstones and sandstones with occasional beds of coal and ironstone (the latter dispersed through particular beds of other rocks). The valley is mostly

covered with glacial till deposits. Where the river level has altered, a series of terraces have been cut into alluvial deposits.

Soils are characterised by base poor, gleyed soils which are waterlogged, lacking oxygen and nutrients. Where the soils are permanently wet the horizons tend to be rich in organic matter and often intergrading into peat deposits. Along river channels soils tend to be alluvium, created and carried by relict rivers.

### **Species and habitats**

This is an agricultural landscape with limited biodiversity value as much of the land is improved, although there are occasional, isolated patches of unimproved grassland which enhances biodiversity. Mixed species hedgerows provide an important habitat linking woodland and other habitats. In wetter fields there are rushy pastures which provide diversity as do the heath species such as heather and bilberry that are often located along verges.

### **Tree cover**

Woodland exists as shelterbelts and often densely along streams and tributaries giving the impression of a well wooded landscape set within the pastoral farmland. There are scattered ancient woodlands throughout the character type such as around the western side of Shire Hill; these further contribute to the wooded nature of the landscape. Most woodlands are broadleaved and contain species such as oak, ash and sycamore. There is some coniferous plantation woodland such as around Dovestones Reservoir in the North of the area.

### **Land use**

This is a pastoral landscape of cattle and sheep grazing. In some areas, agriculture is more intensive with dairying and stock rearing. There are reservoirs in this landscape, such as the Coombes Reservoir, the Bottoms Reservoir and the Dovestone Reservoir.

Areas such as Whaley Bridge and New Mills were also historically important for coal mining and the coal extracted was very important in the 19th and early 20th centuries to provide fuel for local manufacturing and industry. While not much remains at surface of these once important mines, there are rare examples of Cornish steam engine houses and other colliery structures still standing. There are sandstone quarry sites of varying size on the higher ground.

### **Enclosure**

This is a landscape of small to medium fields, many of which are known to pre-date the first historical mapping of the mid 17<sup>th</sup> century. Other enclosures are also irregular but undated, while there are examples of regular enclosure such as to early 19th century Parliamentary Enclosure fields to the south-east of Glossop.

Within this landscape character type there are several small areas of narrow fields that reflect piecemeal enclosure of strips on medieval open fields associated with the settlements, to the east of Hadfield, around Padfield, and to the south of Glossop at Charlesworth, Whitfield and Chunall.

### **Settlement, buildings and monuments**

This is a settled landscape with distinctive gritstone mill settlements and dispersed outlying settlement. The valleys contain numerous historic mills that drew on water power. These supported woollen, cotton and paper milling industries and some are of 18th-century origin. Examples are found at Birch Vale, Chinley, Uppermill and Glossop. Beyond the urban centres, such as Glossop, New Mills and Whaley Bridge, there are three distinctive forms of settlement in the landscape: dispersed farmsteads, farmsteads clustered with other dwellings in hamlets, and terraces associated with historic mills. There is a deserted medieval village at Arnfield.

## **Transport, access and recreation**

This landscape has a relatively strong network with some busy roads and many smaller winding lanes that connect areas of settlement. There are two train lines running through this landscape. There were once further railway branches in this landscape character type that have now closed, some now forming recreational routes such as the Sett Valley Trail.

## **Riverside meadows LCT**

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

**This landscape character type exists in two locations within this fringe landscape along the River Etherow and further south along the River Goyt.**

### **Key characteristics**

- A flat alluvial river corridor with seasonally waterlogged alluvial soils
- Meandering river channel with shingle beds and marginal vegetation
- Grazing meadows, often with patches of wet grassland
- Dense waterside and scattered hedgerow trees
- Historic mills and water management feature

### **Geology, landform and soils**

This is a river valley bottom landscape and has a narrow almost flat floodplain. There are deposits of alluvial silts sands and gravels. Hollows within the floodplain reflect the past courses of the river.

The floodplain is characterised by gleysed soils that are either continuously or seasonally waterlogged. The river enhances the fertility of the soil when flood water deposits nutrients that replenish the wet soils. Palaeochannels may contain important evidence for past landscapes, environments and vegetation.

### **Species and habitats**

The meadows are either seasonally or permanently wet, creating wet pastures which support soft rush and some sedges.

### **Tree cover**

The river banks are densely lined with alder and some willow. This creates an intimate landscape where views are filtered by watercourse trees and framed by the adjacent wooded slopes. In places there are small copses of willow carr and poplars.

### **Land use**

This is a pastoral landscape with permanent pasture dominating due to heavy soils and seasonal waterlogging. There is some semi-improved grassland. In the past, land uses have been more industrial, the fast flowing rivers were used to power industry. Away from the urban areas on the narrow floodplain some mills still survive and are often converted to other uses, while other mills have been demolished and only remnant mill ponds, weirs and races give evidence of this past industry in this tranquil landscape.

### **Enclosure**

Enclosure in this landscape is often irregular, particularly along the River Goyt where its origin is unknown. Generally, small fields are bound by mixed species thorn dominated hedgerows creating a sense of enclosure adjacent to the river; the presence of riverside trees enhances this sense of enclosure.

## **Settlement, buildings and monuments**

This is a largely unsettled landscape where the wet ground and risk of flooding make development difficult. There are built up areas and the occasional gritstone farmsteads on the higher ground above the valley bottoms and several sites of former mills.

## **Transport, access and recreation**

There are few roads within the character type due to the wet nature of the soils creating limited opportunity for road building. In places roads and the railway line cut through the landscape to cross over the river. Crossing points vary with some gritstone bridges and, later, metal bridges. A short segment of the Cromford and High Peak Railway route falls within this landscape at Whaley Bridge. The Peak Forest Canal follows the floodplain in places.

The Bugsworth Canal Basin was an important transport hub created in the late 18th century that today forms an important leisure resource.

# **The Dark Peak Yorkshire Fringe**

## **Introduction**

The Dark Peak Yorkshire Fringe lies to the east of the Dark Peak and Eastern Moors and while this character area displays many of the characteristics of its neighbouring LCAs. It is also strongly influenced by the more settled areas to the north and east, including the urban areas of Sheffield and Huddersfield. The landscape comprises upland areas that have largely been enclosed. In places, settlement is associated with industry as well as agriculture including localised wool manufacturing, coal mining and iron production. Sloping land is often well wooded and it is this characteristic that defines the upland edge along the margin of the Dark Peak. Much of this land still retains a strong pastoral character despite the urban and, in some cases, industrial influences of the towns and villages. Settlements such as Penistone, Holmfirth and Stocksbridge have a strong industrial heritage often relating to wool, cotton and cloth production as well as mining and engineering industries. Other settlements have remained much smaller such as Bradfield, with its two castles, and Ewden, despite their past industrial heritage.

## **Physical influences**

The Dark Peak Yorkshire Fringe comprises an extensive area of Carboniferous rocks along the eastern fringe of the Derbyshire Dome. A major part of this sequence is made up of a mixture of shales and gritstones belonging to the Millstone Grit series, which have been eroded to produce a distinctly undulating topography. The upstanding, higher ground tends to be formed from gritstone, while the valleys and other lower lying areas are cut into the underlying, softer shales. The more rolling Yorkshire Coalfield lies along the eastern edge of the Dark Peak Yorkshire Fringe. The distinctive geology of the area has influenced the development of Sheffield as a steel making city.

The landscape falls away from the higher summits of the Dark Peak into the lower lying valleys and floodplains in the valley bottoms. Deep, narrow, steep sided cloughs within this sloping ground carry water from the moorland summits into the River Don and Rother via a number of tributaries including the Sheaf, Porter, Loxley and Rivelin.

The soils in this area are variable, reflecting differences in the underlying geology. Shallow, and in places impoverished, mineral soils can be found on the gritstone hills and slopes, which tend to produce agriculturally poor land dominated by permanent pasture with patches of rough land containing scattered relict heather and bilberry reflecting the previous moorland character.

## **Ecological influences**

The steep sided cloughs tended to remain unimproved due to their steep topography and can provide variation between damp and dry habitats. Woodland in these cloughs tends to be broadleaved and a combination of oak mixed with ash, hazel, rowan, birch and, in wetter areas, alder. The floors of woodlands are often carpeted with bluebells, dog's mercury and yellow archangel. Conifer plantations are often, though not exclusively, associated with reservoir valley sides, and may have patches of semi-natural woodland or broadleaf plantation within them. The flora is generally limited but can be of importance for fungi. Several birds of note are associated with the plantations, such as goshawk and crossbill.

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

## **Human influences**

The Dark Peak Yorkshire Fringe has a close association with pastoral agriculture and early industrial activity. The location at the junction between the Millstone Grit uplands of the Peak District and the Yorkshire Coalfields made it a good location from which to exploit the resources of both. This location in between two significant regions gives these fringe landscapes a unique character different from the higher land further west within the Dark Peak and the lower ridges and valleys further east within the Coalfields.

The settled enclosed moorland in the north has long been managed for sheep rearing: there are records of wool production there in the 12th century. These activities have strongly influenced the character of the landscape and in places they culminated in the development of unusual upland settlement and enclosure patterns. These continued to exist after early industrialisation had increased the scale of cloth production and moved much of it to larger mills, which were more conveniently situated near fast flowing rivers in the valley bottoms. Larger populations grew up, associated with the mills and cloth production.

The steeper slopes of the Dark Peak Yorkshire Fringe are more sparsely settled with many large areas of ancient semi-natural woodland. Pastoral farming is now a dominant land use in these more wooded landscapes. Some settlements, including the village of Bradfield and many smaller hamlets and farms, have a history going back to the medieval period, if not before, and are primarily agricultural in character. There is an important concentration of cruck- framed barns in the Bradfield area.

In the past the woodlands were often associated with charcoal, white coal (kiln dried wood) and timber production supporting industry. The landscape was a hive of early industrial activity: woodland was a valuable resource for charcoal production and was used for iron smelting, continuing in use until the 19th century. Equally important, to the west of Sheffield, was the production of white coal, which was produced in vast quantities in the 16th to 18th centuries to provide fuel for lead smelters located on the west side of the city. In both cases, woodland was coppiced to increase yield to maximise fuel production.

Coal for domestic and industrial use was mined in many shallow mines near the outcrop of several seams within the Yorkshire Fringe. There are records of small scale mining in the 12th century. From the 16th and 17th centuries, the growth in early industrial activity increased coal production. Mining grew exponentially from the 18th century to meet the demand for local coking coal for large scale iron and steel smelting as well as steam power. As easily won resources became rarer, the focus of mining moved eastwards into the lowlands, with large mines developed to reach coal at depth.

Between the 17th and 20th centuries water in the Rivelin and Porter Valleys was harnessed to power numerous forges and grinding workshops, and extensive remains of dams, leats and buildings are visible today.

Many transport routes cross through this moorland fringe area, these are characterised by former packhorse routes and turnpike roads. In turn, these have influenced some of the settlements which capitalised on their location adjacent to the open moors to provide resting opportunities for travellers before and after the ordeal of crossing the inhospitable open moors. At Ringinglow, a toll house and inn developed at the junction of two major turnpike roads, one which ran from Buxton to Sheffield and the other from Chapel-en-le-Frith to Sheffield. The small village of Bolsterstone is located on a salt route from Cheshire to Yorkshire.

Later human influences on the Dark Peak Yorkshire Fringe include the construction of reservoirs to provide water for the rapidly growing settlements such as Sheffield and Holmfirth. Reservoir construction started in the late 1830s and varies in scale and there are some relict agricultural landscapes that were 'cleared' from the water catchments. The reservoirs are often associated with plantation woodlands around their shores with gritstone walling and dams. They now offer opportunities for recreation, often having tracks through the woodlands for cycling or walking.

The moorland edges have historically been used for extensive military training. Close to Redmires Reservoirs are the well preserved remains of a large camp that was initially built as a WWI training barracks, but later functioned as prisoner of war camp in both World Wars.

Although the large settlements within or at the edge of the Dark Peak Yorkshire Fringe are often based around, or influenced by, industry and production, today these have only a limited influence on the surrounding landscape which is now largely rural and agricultural in character.

### **Sense of place and special qualities**

As the landscapes fall away from the open moorlands of the Dark Peak they include exposed upland settlements of farmsteads with gritstone weavers' cottages in the north. The Yorkshire Fringe landscapes are often sparsely settled with isolated gritstone farm properties, with a strong sense of remoteness and tranquillity. The slopes tend to be a mosaic of woodland and pastoral fields which offer a striking contrast with the higher moorland to the west and the more settled landscapes outside the Park boundary. Moving down from the uplands on to the valleys and slopes, the landscape becomes less wild and more pastoral, with gritstone walled and hedged enclosures and woodlands. Improved grassland and the patches of woodland create variety in both texture and colour. Moorland vegetation, such as bilberry, still exists along field boundaries and verges. In places the landscape remains unsettled, particularly on steeper ground and up into the cloughs, where access is limited.

Today the sparsely settled and largely pastoral slopes and valleys contrast with their industrial past. Some valleys have altered significantly with the establishment of reservoirs and plantation woodland but generally today this LCA is a peaceful, tranquil landscape. This pastoral landscape offers a striking contrast to the surrounding urban areas and forms an important 'buffer' between the Park and those urban areas.

The Dark Peak Yorkshire Fringe can be sub divided into a number of different landscape types, each of which is characterised by a particular aspect of the wider Dark Peak Yorkshire Fringe character. They have been defined by their broadly repeating patterns of natural elements and cultural factors:

- **Enclosed gritstone upland**
- **Densely enclosed gritstone upland**
- **Slopes and valleys with woodland**

## Enclosed gritstone upland LCT

An enclosed upland landscape associated with high, gently undulating uplands and broad ridge summits which radiate from the Dark Peak core, sloping in places up to higher ground. This is a landscape of isolated stone farmsteads, straight roads and regular fields enclosed by drystone walls.

This landscape occurs on the edge of the moorland core, as a series of discrete areas along the eastern fringe of the Dark Peak between Penistone and Sheffield.

### Key landscape characteristics

- Rolling uplands and broad ridge summits with some steeper slopes
- Localised pockets of peat which support remnant patches of semi-natural habitats with bracken and gorse, some heather and bilberry.
- Small remnant woodlands and scattered trees, often in cloughs and along some field boundaries, and some coniferous plantations.
- A regular pattern of medium to large fields of permanent pasture and rough grazing enclosed by gritstone walls
- Scattered trees along boundaries, streams / ditches and grouped around farmsteads
- Straight roads with wide verges of grass and some heather
- Isolated gritstone farmsteads with stone slate roofs

### Geology, landform and soils

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

The underlying bedrock is Millstone Grit and is often exposed as rock outcrops, particularly on the steeper slopes where it sometimes forms small gritstone edges. Towards the east there are outcrops of Coal Measures, including interbedded sandstones and shales and some seams of coal.

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

### Species and habitats

Although most of the land is now improved for pasture, many patches of semi-natural vegetation exist along verges, on steeper slopes and even as isolated patches within some fields. Heath-associated species, such as heather, bilberry and gorse are a common feature in many places. Where the soils are wetter species such as purple moor grass tend to be more common. There are some patches of soft rush on the wetter soils, which often support small populations of breeding birds such as snipe.

### Tree cover

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

### Land use

This is a pastoral landscape of improved or semi-improved permanent pasture with sheep and cattle grazing and some rough grazing. There are some reseeded grass leys and very occasional arable fields. However, the soils are mostly of poor quality and some fields are dominated by rushes or are reverting to moorland habitats, providing habitat diversity.

## **Enclosure**

This land was waste and commons prior to enclosure. This is a landscape with a mixture of enclosed moorland, such as on Dore Moor and Stone Moor, south of Deepcar, as well as smaller improved fields. Much of the latter is Parliamentary Enclosure, for example near Rivelin Rocks, south of Dore Moor and east of Houndkirk Moor. Most enclosure comprises regular, rectangular fields. Drystone gritstone walls are the prominent enclosing element, particularly on higher ground although in places there are hedgerows and fencing. This tends to be further towards the lower fringes of the landscape and not on higher ground.

## **Settlement, buildings and monuments**

There is a cluster of prehistoric activity on the moorland edges, as seen on the Eastern Moors further south. This includes monuments, field systems, enclosures and settlement at Cowell Flat, and a major bank and ditch land division, the Bar Dyke.

Today, settlement tends to consist of scattered isolated gritstone farmsteads with stone slate roofs often dating from the time that the landscape was enclosed. These scattered settlements are sometimes associated administratively with nearby villages and hamlets. Although isolated properties are the dominant settlement type there are some loosely-nucleated ‘hamlets’. Settlement often uses the natural landform for weather protection. Along the busier roads running through the landscape there are occasionally some modern, infill developments; these tend to be in the lower lying areas. Evidence of historic quarrying on the moorland edges.

## **Transport, access and recreation**

This is a remote landscape. Where roads exist they tend to be straight with even verges, laid out when the land was enclosed. In places larger, busier roads cross the landscape and these are more dominant features. Within this landscape type there are some older and now redundant packhorse routes visible as earthworks.

## **Densely enclosed gritstone upland LCT**

An undulating upland landscape with a strong pattern of small rectangular fields. Settlement is scattered but often associated with hamlets and villages such as Meltham and Holme on lower ground. Many of the small gritstone farmsteads and cottages are associated with the former woollen industry as evidenced by the characteristic weavers’ windows lighting the top floors of buildings. This is a predominantly pastoral landscape enclosed by gritstone walls, with outlying patches of remnant heather moorland and some small woodlands.

**This landscape occurs as a single cluster of discrete areas on the edge of the moorland core, in the north eastern margin of the Peak District in the Dark Peak Yorkshire Fringe around Meltham and Holmfirth.**

## **Key landscape characteristics**

- High rolling hill summits and open views over surrounding landscape and to adjacent hills
- A regular pattern of small fields of permanent pasture and rough grazing enclosed by gritstone walls
- Remnant patches of semi-natural habitats with bracken and gorse, some heather and bilberry. Small remnant woodlands and scattered trees, often in cloughs and along some field boundaries, and some coniferous plantations.
- Scattered settlement of small gritstone farmsteads and cottages

## **Geology, landform and soils**

This is an upland landscape with an undulating topography that rises to higher open moorland summits. Across much of the area, the underlying bedrock is Millstone Grit and on rising ground there are a

number of deeply incised cloughs formed by fast flowing streams. Towards the east there are outcrops of Coal Measures, including interbedded sandstones and shales and some seams of coal.

### **Species and habitats**

The variable nature of the geology and landform give rise to a variety of soil types ranging from free draining podzols on steeper slopes to wetter, peatier soils on gentler summits. All the soils are characterised by their impoverished, acidic nature and although most of the land is now improved or semi-improved for pasture, many patches of semi-natural vegetation still exist along verges, on steeper slopes and as isolated patches within some fields. There are some patches of soft rush on the wetter soils, which can support small populations of breeding birds such as snipe, curlew and lapwing.

### **Tree cover**

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

### **Land use**

The main land use within this landscape is improved pasture for sheep grazing; there is some cattle grazing. This enclosed agricultural landscape exists adjacent to open moorland and in places exists close to the moorland summit. However, the soils are mostly of poor quality and some fields are dominated by rushes or are reverting to moorland habitats, providing habitat diversity.

### **Enclosure**

This landscape was enclosed using drystone walling to create very small fields, sometimes interspersed with small areas of enclosed moorland. This enclosure was historically associated with the woollen industry combined with small land intakes to enable sheep rearing and subsistence farming. Some historic enclosure possibly relates to the establishment of the early wool producing communities in the uplands. Other enclosure is much later, taking place in the 19th century as Parliamentary Enclosure, but was still linked with the local dual economy of agriculture and woollen textile production.

When there was a higher density population living in the valleys than on the agricultural uplands then each moor was divided according to the number of people who had traditional grazing rights. The result of this division was many particularly small parcels of land. Some of the woollen workers probably took advantage of the newly allocated land on the uplands and created smallholdings here rather than selling on their parcels.

The medieval and later farming landscape above the Digley reservoir was cleared to protect the catchment area, and now exists as a tranquil relict farming landscape.

### **Settlement, buildings and monuments**

Several significant prehistoric enclosures have survived despite being overlain by post-medieval field systems. Flint scatters and find spots show prehistoric activity along the moorland fringes.

There are scattered gritstone farmsteads throughout most of the landscape. The building form tends to be simple, built using local gritstone and either stone slate or blue slate roof tiles. Weaver's cottages are a particular local feature here with distinctive rows of long, vertical upper windows designed to maximise light for weaving. Isolated weaver's cottages tend to be associated with the earlier wool industry. As the industry grew this type of window became more common and was often incorporated into three storey terraced proper ties, found both on these uplands and in the valleys below. These cottages still stand as testament to the historical importance of wool production in the area.

## **Transport, access and recreation**

Roads generally tend to be small straight lanes running between settlements. There are some significant roads, such as the A635 along Turton's Edge. Historic inns are found relating to longer distance routes linked the communities to the markets and settlements in the lower lying areas. There are smaller roads within the landscape; some are Parliamentary Enclosure roads dating from when the landscape was enclosed from wastes and commons. Small tracks are used for access to fields and farms.

## **Slopes & valleys with woodland LCT**

A small scale but extensive pastoral landscape which is heavily wooded in places. There is a varied undulating, often steeply sloping topography. Interlocking blocks of ancient semi-natural and secondary woodland are a characteristic feature of this landscape, together with patches of acid grassland and bracken on steeper slopes.

This landscape character type exists as a series of interlinked areas along the eastern fringe of the Peak District running from Holmfirth to south of Sheffield. It forms a natural border between the Peak District and the more densely settled landscapes to the north and east associated with Huddersfield, Barnsley and Sheffield.

## **Key landscape characteristics**

- Steeply sloping and undulating topography with gritstone edges characterising the tops of some steeper slopes
- Irregular blocks of ancient semi-natural and secondary woodland with patches of acid grassland and bracken
- Permanent pasture in small, often irregular, fields enclosed by hedges and gritstone walls
- Narrow winding, often sunken lanes with scattered gritstone farms and loose clusters of dwellings
- Historic industries and numerous reservoirs

## **Geology, landform and soils**

This is a landscape with a prominent, sloping topography lying on the edge of the gritstone moorland and sloping towards the lower lying rolling land associated with the Coal Measures geology, to the east. The underlying geology is a mixture of shales and interbedded gritstones giving rise to a dissected, undulating landform. In places the slopes are dissected by deep cloughs often containing streams established during the last ice age as the ice sheet melted. There are Coal Measures outcrops near to Penistone and Totley.

The soils are varied, reflecting the mix of rock types, and comprise both slowly permeable, gleyed soils with localised shallow and rocky patches over shale and shallower, free draining soils with patches of impoverished land over the gritstone.

## **Species and habitats**

There is extensive deciduous woodland cover throughout the landscape. This is often made up of ancient semi-natural woodland comprising both sessile and pedunculate oak, usually with a mixture of downy and silver birch, holly, rowan and hazel. There is often a good woodland ground flora, with species such as bluebell being widespread in some woods. Patches of acid grassland and bracken can often be found on the steeper slopes, in places associated with patches of relict dwarf shrub heath, supporting heather, bilberry and gorse. Some grasslands contain wet flushes supporting a range of damp loving species such as mosses and ferns.

## **Tree cover**

This landscape has a strongly wooded character, defined by hillside woodlands, wooded cloughs, scattered trees along field boundaries and watercourse trees. Tree groups exist around settlements and associated with the steeply sloping topography, creating a series of framed and enclosed views

throughout the landscape. There is a mixture of broadleaved semi-natural woodland and coniferous plantations. Many of the woodlands were previously utilised for white charcoal production and were often historically coppiced. 20<sup>th</sup> century plantation woodlands are often planted on slopes above reservoirs, such as around Langsett Reservoir.

### **Land use**

This is a well wooded landscape interspersed with broad areas of pastoral agriculture: mostly a low intensity, pastoral landscape, used principally for stock rearing. As the landscape rises up to the moorland edge rough grazing tends to predominate.

There are reservoirs within this landscape including Langsett Reservoir, Dale Dike Reservoir, Damflask Reservoir and Rivelin Dams. The reservoirs were built from the 1830s onwards and illustrate a changing relationship to the landscape as they were built to meet the growing needs of urban settlements such as Sheffield. The reservoirs and plantations are popular destinations for recreation.

### **Enclosure**

Enclosure within this landscape is a complex patchwork of irregular fields of unknown date, some no doubt with medieval origin but with no early maps to confirm their date, and in a similar amount 18th or 19th century enclosures, mostly brought in from patches of moorland after Parliamentary Enclosure. There is a small area of fossilised medieval strip fields a short distance to the west of Bradfield, which was once part of the village's open fields. Fields are generally enclosed by drystone walls with some mixed species and thorn hedgerows on lower slopes. To the north there are some rare field walls formed of huge upright stone slabs.

The parkland around Broomhead Hall forms a solitary piece of loosely designed landscape, sitting at the moorland edge.

### **Settlement, buildings and monuments**

Settlement is scattered throughout this landscape with isolated gritstone farmsteads and occasional large houses with stone slate roofs. These scattered settlements tend to lie within traditional townships which have villages such as Bradfield and Bolsterstone, and Dore, the last now subsumed within Sheffield. The medieval motte and Bailey at High Bradfield sits in a strategic valleyside location. These places were focal points for local communities and the settlement pattern was thus not dispersed in a true sense. In places there are also small clusters of farms and cottages, such as at Wigwizzle, Midhopestones and Upper Midhope. There is a significant concentration of cruck barns and dwellings in the Bradfield area.

### **Transport, access and recreation**

This is a generally peaceful landscape with small lanes, often sunken, providing access to settlement. There are some larger and busier roads, particularly in the east towards the nearby urban settlements. Many routes have evolved from packhorse routes. Others result from rationalisation at the time of Parliamentary Enclosure and the building of turnpike roads in the 18th and 19th centuries. Some turnpikes are today's main roads but not all proved to be successful: Mortimer Road at Penistone is a failed turnpike route.

## **The Derbyshire Peak Fringe**

### **Introduction**

The Derbyshire Peak Fringe has an intermediate character and occupies a transitional zone, between the uplands of the Peak District to the north and west and the rural lowlands of Derbyshire with small parts of North Staffordshire to the south and east. The eastern parts are strongly influenced by settled areas to the east associated with the urban centres of Chesterfield and Sheffield. There is particular association

with the historical coal mining and iron making industries of the settlements. The region has a distinctly undulating topography and contains the upper part of the River Dove.

### **Physical influences**

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

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

### **Ecological influences**

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

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

The sloping land tends to support permanent pasture and some rough grazing. In thin soils in more upland locations acid grassland predominates and can support harebells, heath bedstraw, and tormentil along with occasional patches of gorse, bilberry and heather. Improved agricultural land on these lower slopes can have limited ecological diversity, however, where hay meadows are remaining these can

support a range of grass species mixed with flowering species including bird's foot trefoil, oxeye daisy, knapweed, self-heal and ribwort plantain. Grasslands in association with the ridge and furrow topography round Parwich and Tissington can be particularly diverse. Verges, when infrequently managed, can be flower rich and include species such as red campion, meadow cranesbill and knapweed.

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

### **Human Influences**

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

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

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

### **Sense of place**

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

pastoral agriculture with woodland elements and much less wild in contrast with the moorland uplands of the Eastern Moors.

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

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

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

## Slopes & valleys with woodland LCT

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

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

### Key characteristics

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

### Geology, landform and soils

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

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

### Species and habitats

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

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

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

### **Tree cover**

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

### **Land use**

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

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

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

### **Enclosure**

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

### **Settlement, buildings and monuments**

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

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

## **Transport, access and recreation**

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

## **Village farmlands on shale ridges LCT**

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

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

### **Key characteristics**

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

### **Geology, landform and soils**

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

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

### **Species and habitats**

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

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

### **Tree cover**

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

## **Land use**

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

## **Enclosure**

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

## **Settlement, buildings and monuments**

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

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

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

## **Transport, access and recreation**

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

## **Riverside meadows LCT**

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

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

## **Key characteristics**

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

## **Geology, landform and soils**

A key feature of this landscape is the flat alluvial floodplain across which the rivers meander. These rivers have developed on a number of different geological formations, in the north this is mainly the relatively soft Namurian shales from the Bowland Shale formation. The shales give way, below Bradbourne, to limestone interbedded with shales from the Widmerpool formation. Further south from Fenny Bentley, the geology changes again to a sandstone interbedded with conglomerate formation (the Hawksmoor formation).

In places the rivers have cut through the harder gritstone, resulting in a much narrower alluvial floodplain defined by steeper valley sides. This is particularly noticeable in part of the Dove Valley and the lower stretch of the Bradbourne Brook. As a result the width of the floodplain can vary from more than half a kilometre to less than 50 metres at its narrowest point.

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

## **Species and habitats**

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

## **Tree cover**

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

## **Land use**

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

## **Enclosure**

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

## **Settlement, buildings and monuments**

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

## **Transport, access and recreation**

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

# The Derwent Valley

## **Introduction**

One of the more conspicuous features of the Peak District is the lower lying landscapes associated with the valley of the River Derwent and its tributaries the Wye and Noe. The Derwent Valley character area separates the limestones of the White Peak from the prominent gritstone edges of the Eastern Moors to the east and high moorland of the Dark Peak to the north. These areas include the broad Hope Valley with the River Noe before flowing southward to pick up the Wye Valley on its route through to Matlock. The Derwent Valley character area also includes the discreet areas of low gritstone uplands and ridges that lie between the Derwent and Wye rivers between Stanton and Hassop. It also includes a much higher and larger gritstone influenced area centred on Abney which is very similar in character to the Eastern Moors.

## **Physical influences**

The physical character of the Derwent Valley is strongly influenced by areas to either side of the river: the Millstone Grit and the underlying shale-dominated beds. The sediments that formed the Millstone Grit were laid down in the Middle Carboniferous period by a series of rivers flowing from the north creating large river deltas. These rivers deposited a cyclic succession of shales, siltstones, and cross-bedded sandstone. The upstanding, higher ground is formed from gritstone, while the valleys and other lower lying areas are cut into softer shales. The higher ground to the eastern side of the Derwent Valley includes the lower gritstone edges such as Curbar and Froggatt Edges. There is also a series of outlying smaller gritstone hills, ridges and shelves to the west. These include Eyam and Abney area, Offer ton, Calton Pastures, Stanton Moor and Harthill Moor. The remainder of the area has a lower lying, undulating topography within which lie the alluvial floodplains of the River Derwent and its tributary streams. Evidence of a much earlier course of the River Derwent can be seen in the arc of old river terraces that lie between Pilsley, Bakewell and Rowsley. These are thought to have been formed before the last ice age.

Below Matlock, where the river cuts through the eastern edge of the White Peak limestone, the Derwent Valley narrows and the geology changes to a steep sided limestone gorge.

## **Ecological influences**

The soils in the Derwent Valley character area are variable, reflecting differences in the underlying bedrock and in parts the presence of the glacial and alluvial drift deposits laid down in more recent times. On the gritstone summits of Offerton and Abney, Eyam, Stanton and Hartill Moors, rising above the western side of the valley, shallow mineral soils are often impoverished and have either peaty or sandy topsoils. This has given rise to heather and bilberry heathland on Stanton, Eyam and Offerton Moors, with associated areas of bracken and birch scrub. On Abney Moor the heathland has given way to acid grassland and bracken as a result of prolonged grazing. Gritstone tors are a feature of the southern summits around Stanton, Birchover and Robin Hood's Stride, and in places support a lichen and moss flora of local importance.

Shallow mineral soils are also found on the upper slopes descending from the western gritstone summits, and occur much more extensively as a continuous band along the steep upper eastern slopes of the Derwent Valley, where they often descend from massive gritstone edges dropping from the moorland above. These soils tend to produce agriculturally poor land dominated by woodland and rough or permanent pasture. Steep pastures supporting species-rich acid fescue-bent grassland, bracken, and hawthorn and gorse scrub are typical of Eyam, Hucklow, Bretton and Bradwell Edges, and also occur on

the upper slopes on the eastern side of the Derwent valley where they are accompanied by extensive areas of semi-natural upland oak and birch woodland below the gritstone edges. Conifer and mixed plantations occur in places.

Shale-grit tributary valleys on lower lying land around the western gritstone summits, as at Bretton and Abney Cloughs, support a mosaic of habitats including acid and neutral grassland rich in plants and fungi, semi-natural oak-birch woodland, wet alder woodland and wetlands associated with springs, flushes and landslips.

Seasonally waterlogged, gleyed soils are found over the mudstone beds on lower lying land and are utilised as permanent pasture and mowing land. Occasional deposits of fine loamy soils, from till deposited during the last ice age, produce some higher quality pasture. While much of this land in the valley bottoms and gentle lower valley slopes has been heavily improved, particularly in the Hope Valley, remnants of unimproved species-rich neutral pastures and hay meadows survive in places. Species such as yellow rattle, knapweed and oxeye daisy are typical, with sedges, rushes, meadowsweet and marsh marigold in wetter areas. The parklands in the central reaches of the valley are of importance for their mature and veteran trees and associated fungi, lichens and insect life, while ornamental lakes support more typically lowland wildlife. Localised deposits of glacial boulder clay occur between Longstone and Harthill, providing further variation to the floral composition of unimproved grasslands.

Deep, loamy soils have developed over the alluvial deposits on the valley floors. This land is mainly used for permanent pasture, with seasonal flooding allowing the survival of species-rich marshes in places. The main rivers of the Derwent and the lower reaches of the Noe and Wye support birds such as goosander, and an important fish fauna including brown trout, grayling, bullhead and more localised brook lamprey. Alder-lined banks, deeper slower-flowing reaches and shingle beaches all add to the diversity.

### **Human influences**

The open moors of the Derwent Valley character area contain examples of important later prehistoric archaeological remains. These include field boundaries and clearance cairns around farmstead sites; and monuments such as stone circles, barrows, ring cairns and standing stones. Eyam, Offerton and Abney Moors contain typical evidence of these features. Stanton Moor is unusual in having many small funerary cairns as well as a small number of larger monuments, including stone circles, such as the Nine Ladies stone circle, and barrows. These features have survived relatively undisturbed on the moors because there has been upland grazing throughout history, unlike much of the surrounding lower levels where the ground has been disturbed by cultivation. On the lower valley slopes only larger historic features have survived, including Navio ('place by the river'), a Roman fort at Brough and the medieval fortified town of Castleton.

There is no consistent settlement pattern within the Derwent Valley character area. It is as diverse as the soils and geology on which it is founded. Late Saxon royal manors, including Hope, formed the core of extensive areas of royal forest. Most of the current basic pattern of villages and smaller settlement was established by the time of the Norman Conquest. While the moorlands have not been settled since prehistory, and there are some isolated farms in more upland landscapes, these areas all lie within traditional townships which have villages on better land below, and the farmsteads are therefore not truly dispersed but part of a mixed settlement pattern. The density of settlement increases as the agricultural viability of land improves and in the valleys there is a mixture of villages, hamlets and scattered farmsteads in a complex interspersed pattern. Late 16th- and early 17th-century gentry houses are a notable feature of this area.

This is an ancient farmed landscape. Some of the dispersed farms on lower land have enclosed fields with medieval origins, while many villages had open fields which were gradually enclosed from later medieval times onwards. Many parts of the farmland continued to evolve through the post-medieval period with field patterns regularly modified by individual farmers and estates in response to changing farming needs. There are a number of planned estate farms associated with the large estate houses. There is a mixed

field pattern of small to medium sized fields. Fields on the lower slopes are often enclosed by a mixture of thorn hedges and walls, while on the higher land local gritstone is used in drystone walls. The gritstone moors and parts of the slopes and valleys form large, unenclosed landscapes supporting rough grazing and patches of secondary woodland.

On the upper valley slopes, some areas were taken in from common, but often these were long established woodlands which have survived because the land is steep and boulder strewn, and because woodland has always been an important resource. Historically, woodland was important to communities for grazing and firewood, while later woodlands provided a long-term cash crop for estates. In the 16<sup>th</sup> to 18th centuries many woodlands were maintained as coppices to provide white coal (kiln dried wood) for the lead smelting industry. The Derwent Valley has long supported a range of industrial activities including quarrying, lead mining and smelting along with harnessing water to power mills.

The gritstone scarps at the top of the Derwent Valley slopes were of particular importance for millstone making from at least the 13th century through to the 20th century. Domed millstones, for grinding wheat, were made along most of the main edges of the Derwent Valley. In the 19th and 20th centuries production changed and stones of different form were produced for milling animal feed, as pulpstones for paper manufacture and as grindstones. Broken and unfinished millstones, pulpstones, troughs and gateposts are still visible in quarries and at the scattered boulders below many of the escarpments. From the 18th century to the present, gritstone quarries around Stanton, Birchover and Stoke Hall have produced high quality building stone, including dressed ashlar, sills and lintels, quoins, troughs and gateposts.

The gritstone scarps were not only used for quarrying gritstone: the high gritstone scarp slope of Hucklow Edge and Eyam Edge contained some of the richest lead mines in the orefield. These were developed from the early 18th century onwards, as one of the major vein complexes was followed eastwards at depth beneath the shale and gritstone. The large waste heaps were extensively reworked for fluorspar in the 20th century. Underground fluorspar mining took place at Glebe Mine, Eyam, Ladywash Mine on the enclosed upland above and at Milldam Mine, Great Hucklow. Further south, Millclose Mine, north-west of Darley Bridge, was one of the richest mines in the world in the first half of the 20th century.

Water was used as a form of power for hundreds of years in the Derwent Valley; Domesday Book records our mills at Bakewell and Ashford. During the 18th century demand for water power increased and several large mills were constructed on the rivers Wye and Derwent. These mills included those at Hathersage and Calver, and Arkwright's mill at Bakewell.

In contrast to this industrial working landscape the Derwent Valley also contains most of the few parkland landscapes that are found within the Peak District. The designed parkland at Chatsworth makes an impact at a landscape scale, transforming this part of the Derwent Valley, while much smaller examples are found at Haddon, Hassop, Thornbridge, Ashford and Stanton. These parks are associated with halls and grand houses dating from the medieval period to the 19th century. Haddon Hall and Chatsworth House are particularly important for their historical and architectural interest, and their surrounding gardens; both are major tourist attractions. Both Chatsworth and Haddon had large medieval deer parks which were removed in the 18th century. At Chatsworth, the medieval deer park to the east of the house was replaced from 1759 by a landscape park in the valley to the west, designed by Capability Brown. This park was created from agricultural land and contains extensive earthworks, making it one of the most important archaeological landscapes in Britain. At Haddon the small park around the hall was not redeveloped until the later 19th century with tree screens added in the 20th century. Hassop and Thornbridge parks were created in the 19th century as much more private places than 18th century Chatsworth, reflecting changing aesthetic fashions.

Braided hollow-ways, often deeply eroded into the land, are visible running up the scarp slopes and across the moorlands, especially across Eyam Moor. While a few of these gave local access to commons, quarries and mines, the majority were through routes of medieval to late 18th century date from the

Peak District, across the Eastern Moors, to the lowlands to the east. There were many such routes, for exporting products including lead, millstones and cheese, and for cross-Pennine trade of salt, ceramics and products of the iron and steel centres around Sheffield and Chesterfield. These traditional routes, many with their distinctive early 18th century waymarkers, were replaced in the 18th and 19th century by the turnpike road network, the basis of the main modern routes in the Derwent Valley character area. Hedges are common alongside some roads, often because these were created as early 19th century turnpikes and hedging was the trust's favoured way of bounding their roads.

### Sense of place

This is a varied landscape of broad meandering rivers with riverside trees and woodlands, wet meadows, hedges and drystone walls, which contrast with the high open rolling moorland of gritstone hills where open views predominate. Plantations, historic halls, manor houses and parkland are all hidden amongst the main valleys and lowlands of undulating uplands and ridges. The rolling open summits are predominantly divided into regular fields by gritstone walls, the exception being Birchill which has hedges. Dense ancient woodlands and plantation woodlands carpet the steep slopes from the Dark Peak plateau, Eastern Moors and hills down to the small pastoral fields with filtered views between scattered hedgerow trees.

The landscapes of historical wealth and power are seen in the open parks and gardens, and well managed estates which dominate the central area of the valley. The largest number of halls and houses including Chatsworth and Haddon can be found in the valley, controlling and defining the landscape.

The one consistent landscape feature running throughout the Derwent Valley character area is its rivers. These include the broad main rivers of the Derwent, Noe, Wye and Lathkill, as well as the smaller streams, which have helped create and define the landscape that we see today. They provide refuges for wildlife, contain historic features and are a major tourist attraction. The rivers provide constant movement and change: one day being sleepy and slow the next raging torrents, bursting their banks. No other character area within the Peak District is as heavily influenced by water.

Seven distinct landscape character types have been identified in the Derwent Valley character area. They have been defined by their broadly repeating patterns of natural elements and cultural factors:

- **Open moors**
- **Enclosed gritstone upland**
- **Slopes & valleys with woodland**
- **Gritstone village farmlands**
- **Valley farmlands with villages**
- **Estatelands**
- **Riverside**

### Open moors LCT

An open rolling moor and heathland landscape associated with gritstone summits. This is an unsettled landscape with wide views and a sense of remoteness and space.

The open moors are to be found on the highest land within the Derwent Valley character area. They are found at the tops of three gritstone hills: two in the north at Abney and Offerton and Eyam while the third is found near Birchover.

### Key characteristics

- Rolling gritstone summits with scattered rock outcrops and tors
- Unenclosed heather moor extensively grazed by sheep with patches of secondary birch woodland and bracken

- Wide views to distant hilltops
- Extensive archaeological evidence of prehistoric and later activity

## **Geology, landform and soils**

This is a landscape with a high, flat topped topography, associated with gritstone summits. In the Derwent Valley character area these occur as western outliers of the more extensive Eastern Moors. The elevation of these uplands allows for wide open views to distant hills. The underlying bedrock of predominantly Millstone Grit is exposed in places, creating occasional gritstone tors and scarps, especially around the edges of this landscape, where the land often drops away steeply revealing prominent rocky edges.

Impoverished, shallow soils over gritstone bedrock predominate, sometimes with a peaty surface layer.

## **Species and habitats**

There are extensive areas of dry moorland or heath habitat with heather as the dominant species; rocks and boulders are a feature locally. Where areas of the moor have been grazed, grazing tolerant shrubs such as bilberry, crowberry and grasses are more dominant. In places, on the steeper slopes around the edges of the moors, some bracken is found, elsewhere, for example on Stanton Moor, birch woodland has developed.

## **Tree cover**

On Abney, Eyam and Offerton Moors this is generally an open landscape with limited areas of tree cover and expansive views; historical grazing pressures have inhibited tree regeneration. By contrast, on Stanton Moor, there are extensive areas of mature and secondary birch woodland interspersed with oaks.

## **Land use**

Due to poor soils, the land has low agricultural value and rough grazing predominates with extensive grazing by sheep. Small scale stone extraction has taken place on Eyam Moor. In addition on Stanton Moor there are several extensive relict gritstone quarries dating from the 18th to 20th centuries; some are still operating.

## **Enclosure**

This is a largely unenclosed landscape. Where gritstone dry stone walls do occur they have divided the moorland into large moors defined by ownership boundaries.

## **Settlement, buildings and monuments**

Although now an unsettled landscape, there is much evidence of later prehistoric settlement and monuments, particularly on Offer ton Moor, Highlow Bank and Eyam Moor. One of the largest and most significant prehistoric landscapes is found on Stanton Moor. These are features which are more commonly found on the Eastern Moors. These include field boundaries and clearance cairns around farmstead sites, and monuments such as stone circles, barrows, ring cairns and standing stones. At Burr Tor there is a prehistoric stock enclosure.

## **Transport, access and recreation**

Transport is a limited feature of this landscape character type. This enhances the sense of remoteness because of the absence of roads running through the landscape and the need to access the area on foot. Braided hollow-ways, often deeply eroded into the land, can be seen running across the moorlands, especially across Eyam Moor. These gave local access to commons, quarries and mines and linked settlements to the main packhorse routes to Sheffield and Chesterfield. Large parts of the open moorland are open access land.

## Enclosed gritstone upland LCT

An enclosed upland landscape associated with high ridges, shelves and former moor tops. This is a landscape of isolated stone farmsteads with regular and irregular fields enclosed by drystone walls with patches of acid grassland. There are scattered mature boundary trees and groups of trees.

Enclosed gritstone uplands can be found in four discrete blocks on hilltops and are, but not exclusively, associated with areas of open moors. They can be found above Stanton, Harthill Moor, around Bretton and on Calton Pastures.

### Key characteristics

- Rolling uplands with a pattern of small to medium sized fields of regular and irregular shapes enclosed by gritstone walls
- Scattered mature trees in field boundaries and some tree groups. Remnant patches of rough land with bracken
- Straight roads with wide verges
- Isolated gritstone farmsteads with stone slate roofs with tree groups for shelter
- Important lead mining sites and prehistoric monuments

### Geology, landform and soils

This is a landscape with a high, rolling topography associated with gritstone ridges, shelves and former moor tops. The underlying bedrock of Millstone Grit and some shales is exposed in places to give occasional gritstone tors. The high topography allows wide views to surrounding hills.

Shallow, in places impoverished, loamy soils over gritstone bedrock.

### Species and habitats

Land use is mainly permanent pasture with a few isolated fields of ley grassland. There is a mixture of trees including oak, ash and sycamore with thorn scrub. There are isolated patches of acid grassland on the steeper areas and heather is found in old quarries, while bracken is found within roadside verges.

### Tree cover

Extensive sheep grazing has restricted tree cover and regeneration in this landscape. However, there are occasional tree groups, generally adjacent to farmsteads and planted to create shelter around properties using broadleaved species such as ash and sycamore. There are thinly scattered mature trees and scrub within some field boundaries. At Calton there are large blocks of woodland within and around the edge of the area, primarily coniferous, while around old quarries on Harthill Moor secondary birch woodland is developing.

### Land use

This is a landscape of mainly permanent pasture grazed by sheep. Although sometimes of a similar elevation to the open moors, these former moorlands have mostly been enclosed and farmed from the 18th or 19th centuries, while small areas around Bretton for example have medieval origins. The remains of the 18th century lead mining industry can be seen at numerous locations on the ridge above Eyam; these include Ladywash Mine, New Engine Mine and Broadlow Mine. The local gritstone is prized as a building material and quarrying has taken place from the 18th century to the present day.

### Enclosure

For the most part the landscape is enclosed into a pattern of small to medium sized regular and irregular fields divided by gritstone walls of varying ages. For example, many of those close to Bretton and on Shatton Moor are the result of 19th century Parliamentary Enclosure. However, Calton Pastures was landscaped in the 1760s to create an open outer park contemporary with the main park in the valley

below, both designed by Capability Brown for the Duke of Devonshire. This involved the removal of original field boundaries on Calton Pastures.

### **Settlement, buildings and monuments**

Settlement is confined to a few scattered isolated farmsteads. While Bretton has existed since the medieval period the buildings have been rebuilt in stone in post-medieval times; other farmsteads are likely to be post-medieval in date. Buildings are gritstone with stone slate roofs.

There are significant clusters of prehistoric monuments on these small enclosed gritstone upland areas. These include a number of barrows and an Iron Age promontory fort on the ridge above Calton Pastures, and a stone circle, rock art, barrows and defended prehistoric enclosures near the distinctive rocky outcrop of Robin Hood's Stride. The gritstone tors were important landscape foci during the prehistoric period.

### **Transport, access and recreation**

There are a few minor roads that run through several of these areas. The Sir William Hill road is part of an important 1758 turnpike road that followed an earlier hollow-way route. The new road was superseded by more convenient turnpike roads in the valley below in the early 19th century. There are numerous public footpaths and bridleways linking farmsteads, and historic trackways giving access to local quarries and fields.

## **Slopes & valleys with woodland LCT**

A pastoral landscape with interlocking blocks of ancient and secondary woodland. On the tops of steeper slopes gritstone edges with boulder slopes below are a prominent feature and there are patches of semi-improved and acid grasslands with bracken on steeper slopes.

Wooded slopes and side valleys can be found on most of the steep gritstone slopes throughout the Derwent Valley character area. They are most common on the west facing slopes that form the eastern edge of the Derwent Valley and run in a continuous strip from the Derwent reservoirs to Matlock. They are also found below Stanton, Eyam and Abney Moors. In the latter area they include Abney and Bretton Clough.

### **Key characteristics**

- A steeply sloping landform with gritstone edges characterising the tops of steeper slopes
- Patches and extensive areas of semi-improved and acid grasslands with patches of bracken and gorse. Irregular blocks of ancient and secondary woodland. Permanent pasture in small fields enclosed by hedges and gritstone walls
- Narrow winding, often sunken lanes
- Scattered gritstone farmsteads and loose clusters of dwelling

### **Geology, landform and soils**

This is a landscape with a prominent, sloping topography on the edge of the Eastern Moors and around the series of outlying gritstone uplands and ridges within the Derwent Valley character area. The underlying geology is a mixture of shales and interbedded gritstone, this gives a mixture of dissected, undulating landforms with, in places, long continuous sweeps of landform. Sometimes, along the upper edge of the valley side, gritstone outcrops form a series of vertical cliff-like faces, known as edges. Some of these edges have been modified by quarrying; this occurs particularly between Chatsworth and Hathersage. Locally the failure of the interbedded shales has given rise to characteristic landslip landscapes, for example in Bretton Clough. On Eyam and Bradwell Edge the shales overlie limestone that contain a series of mineral veins.

Soils are varied within this character type, reflecting the mix of underlying rock types. They comprise both slowly permeable, gleyed soils containing localised rocky patches over shale and shallower, free-draining soils, including patches of impoverished land, over gritstone. Small streams and wet flushes often occur at the junction of shales and gritstone. Boulder strewn areas are features of the upper slopes.

### **Species and habitats**

Main tree species are ash and oak with a few blocks of coniferous woodland planted on estate land. There is often good woodland ground flora reflecting continuous woodland cover for hundreds of years. There are frequent fields of semi-improved and acid grasslands, with bracken and gorse on steeper slopes. Fields of improved grassland are found on the easily accessible areas.

### **Tree cover**

Large interlocking, in places extensive, blocks of woodland and mature boundary trees are a continuous feature throughout this landscape type. Woodland is predominantly secondary and ancient with some blocks of coniferous plantation. There is evidence that these woodlands were important for high quality timber and as coppiced woodland for white coal (kiln dried wood), used for lead smelting from the 16th to 18th centuries. The influence of the estates on the wooded slopes is extensive; much is still owned by Chatsworth, Haddon and Stanton estates. Interlocking blocks combine with the sloping landform to frame views within this landscape character type.

### **Land use**

The combination of steep, often boulder strewn, slopes and poor soils mean that much of this land has never been suitable for arable or intensive pastoral farming: woodland and rough grazing has dominated the landscape for centuries. Historically, woodland was important for grazing and fuel; in the 16th to 19th centuries many woodlands were maintained as coppices for the production of white coal for the lead smelting industry. Occasionally, due to land ownership and better ground conditions, there are a few improved fields where the intensity of use increases. Many of the edges, in particular Gardom's, Curbar and Froggatt Edges, have relict gritstone quarries that produced millstones and other items from the medieval period to the 19th and 20th centuries. Above Grindleford, a former millstone quarry at Bole Hill was extended greatly to produce stone for the construction of the Derwent and Howden reservoirs at the beginning of the 20th century. Lead mining sites are located on the slopes above Eyam, Winster and Wensley; these lie along the junction of the limestone and sandstone geologies.

### **Enclosure**

There is a mixture of small to medium sized regular and irregular shaped fields in small areas between woodlands. In places, particularly above Bamford, Hathersage, Baslow and Beeley Hilltop, larger areas of fields can be found. Many of these fields are essentially unimproved, potentially of medieval or early post-medieval date.

On steeper slopes some of the irregular enclosures may be ancient, associated with scattered individual medieval farmsteads rather than the villages with a more communal form of agriculture. Fields are enclosed by a mixture of thorn hedges and gritstone walls.

### **Settlement, buildings and monuments**

Settlement generally consists of scattered or isolated gritstone farms and dwellings with stone slate roofs. Some of the farmsteads have medieval origins, while others were built later; all have been rebuilt in stone from the 17th century onwards. To the south, around Upper Hackney, Darley Hillside and Northwood, there is a more dense and clustered pattern of hamlets on the slopes with wayside dwellings and scattered farms, together with 20th century housing. At Birchover, the rocky tor of Rowtor Rocks was modified, probably in the 19th century, to create a curious pleasure garden of rock-cut steps, caves and seats. The prominent site is likely to have been visited since prehistoric times.

## **Transport, access and recreation**

There is a network of narrow winding lanes, often sunken, linking the isolated farmsteads and dwellings. Some of these roads, in particular on the western edge of the Eastern Moors, were important former packhorse and cart routes to Sheffield, Chesterfield and beyond.

Several main roads cut up the slopes of the Derwent Valley going eastwards. These were first built as turnpike roads in the 18th and early 19th centuries although some have earlier origins as hollow-way routes. In places the only means of access is on foot via the extensive network of footpaths. There are small areas of access land, including land below Bamford and Froggatt Edges.

## **Gritstone village farmlands LCT**

A small-scale, settled pastoral landscape associated with gently rolling gritstone uplands. The landscape is enclosed by a pattern of small to medium sized fields bounded by gritstone walls. Views are open and wide, framed by surrounding higher land.

**The gritstone village farmlands are long established agricultural landscapes, each associated with a central village. They are found in two locations around the villages of Abney and Birchover.**

### **Key characteristics**

- Rolling gritstone upland
- Small to medium-sized pastoral fields enclosed by drystone walls
- Gritstone villages with outlying farms and dwellings
- Wide views to surrounding high hills

### **Geology, landform and soils**

This is a landscape with a high, rolling topography associated with broad gritstone uplands. The high topography enables wide views to distant surrounding hills. There are well drained fine loamy soils over gritstone bedrock that are shallow in places.

### **Species and habitats**

There is little ecological interest over most of the area because pasture predominates. Around Birchover there are localised semi-improved meadows. Bracken is occasionally found in verges.

### **Tree cover**

Due to historic and ongoing management practices this is a relatively open landscape with trees confined to small groups around settlements and as mature trees within boundaries. Sycamore, ash and oak are the predominant species. Grazing pressure has limited natural regeneration.

### **Land use**

The land here mainly consists of permanent pasture of moderate to high intensity, grazed by sheep and cattle. At Birchover, the southerly fields contain shafts and remnants of stone-paved paths relating to the intensive lead mining activity that surrounded Winster.

### **Enclosure**

There is a mixed pattern of small fields bounded by somewhat sinuous gritstone drystone walls. To the north of Abney, some walls have fossilised a medieval open field system creating distinctive small and narrow fields; the remainder are irregular enclosures of unknown date. Around Birchover similar fossilisation took place but this has become less obvious in the 20th century because of field boundary removals.

## **Settlement, buildings and monuments**

Evidence for prehistoric activity around Abney has largely been removed by later agriculture; a single cairn survives on Abney Low and flint tools have been found in ploughsoils. There are many significant prehistoric monuments on the unimproved higher ground nearby.

The nucleated villages of Abney and Birchover lie at the cores of the two small areas of this landscape type, and the medieval foci of these settlements lie at Abney Grange and Uppertown. There are several isolated outlying farmsteads within the two traditional townships. Buildings are simple and robust in design; predominantly gritstone with traditional stone slate roofs and some later blue slate roofs. Birchover was associated with the nearby gritstone quarries and benefited from good building stone.

## **Transport, access and recreation**

Access within this landscape is limited to narrow winding roads linking the villages to adjacent settlements. There is a well established network of footpaths and historic tracks which connects the villages to outlying farmsteads, fields and moors beyond.

## **Valley farmlands with villages LCT**

A settled pastoral landscape, often with a low lying topography associated with a network of streams and damp hollows. This is an enclosed landscape, with views filtered through scattered hedgerow and streamline trees. Villages with outlying farms and dwellings are set within small to medium fields that are often bound by hedgerows.

**Valley farmlands with villages can be found throughout the Derwent Valley character area, the largest area being centred on Hope and Castleton. Other areas where this type occurs are Calver, Froggatt to Baslow, Over End, Great Longstone, Beeley, Two Dales and Harthill.**

## **Key characteristics**

- A low lying, gently undulating topography
- Network of streams and localised damp hollows
- Small to medium sized pastoral fields enclosed by hedgerows and some drystone walls
- Dense streamline and scattered hedgerow trees
- Predominantly gritstone villages and outlying farms with associated dwellings and field barns

## **Geology, landform and soils**

This is largely a low lying landscape with a rolling, in places undulating, topography, associated with the lower lying ground of the Derwent Valley and its tributary watercourses. These rivers have eroded through the Millstone Grit, exposing the softer underlying shales to create a suite of broader valleys. In the Hope Valley and near Youlgrave, this landscape type sits on the boundary of sandstones/shales and limestones.

This is a landscape that has been improved and farmed for many hundreds of years. The soils are mostly slowly permeable or clay soils over shales, with occasional patches of shallower soils over localised outcrops of gritstone. Heavy gleyed soils over shales are often seasonally waterlogged in hollows and depressions.

## **Species and habitats**

Largely improved reseeded grassland with isolated patches of semi-improved grassland and occasional hay meadows. Seasonal waterlogging and wet flushes mean that soft rush can be found in places. Mixed hedges include hawthorn, blackthorn, hazel and holly as the main species. Ash and oak are the principle tree species, giving way to willow and alder in the wetter areas. While on drier ground, bracken and birch

can be found. Secondary planting of ancient woodland sites with broadleaved trees or conifers is common but the original ground flora of wood anemone and bluebells is still evident in places.

### **Tree cover**

The density of trees varies throughout this landscape. There is a mixture of mature hedgerow trees, mainly ash, oak and sycamore, as well as small blocks of woodland, both broadleaved and coniferous, which are prominent in many views. There are occasional isolated, discreet blocks of ancient semi-natural woodland.

### **Land use**

Land use is determined by the heavy soils and permanent pasture dominates the landscape. There is a mixture of improved fields with a moderate to high intensity of usage for dairying and silage.

Numerous mineral veins outcrop on the limestone near Castleton, and there is a long history of mining in the area. Lead has probably been worked since at least Roman times. The decorative Blue John fluorspar has been worked since the 18<sup>th</sup> century and the resulting caverns are now an important tourist attraction.

The modern manufacturing and ancillary buildings associated with cement works is a prominent atypical feature within the Hope Valley.

### **Enclosure**

Fields are enclosed by a mixture of hedges and gritstone drystone walls. Hedgerows beside roads are often mixed species, while internal boundaries tend to be thorn hedgerows. This is a landscape that has been farmed for hundreds of years and the enclosure pattern has developed and been modified to meet changing farming needs over a long period. There are some large areas of fossilised medieval open fields, with particularly broad extents in the Hope Valley and around Great and Little Longstone. Ridge and furrow and lynchets are present in some of these fields. The majority of enclosure away from these specific areas is of unknown date: some parts are dominated by irregular fields that are likely to be early, while other areas have a mixture of sinuous and straight boundaries. This indicates gradual changes on a field by field basis rather than the sweeping changes to whole areas after Parliamentary or Private Enclosure agreements.

### **Settlement, buildings and monuments**

This is a landscape that has been settled and worked for millennia but has only limited evidence of prehistoric activity due to intensive historical land use. The density of settlement varies over the landscape, but is predominantly a mixture of villages, hamlets and scattered farmsteads, many of which have medieval origins. Villages, including Castleton, Hope, Hathersage, Calver, Baslow and Beeley, are scattered through the valley. Castleton was an early planned 12th-century settlement, and archaeological excavations suggest it may have Anglo-Saxon origins. The imposing medieval Peveril Castle stands sentinel on the limestone ridge above the village, and dominates the landscape.

The predominant building material is gritstone with stone or blue slate roofs. The exception to this is Great Longstone and Castleton, where buildings are predominantly limestone with gritstone detailing, reflecting the use of the nearest available good building stone; the limestone in Castleton is particularly fossil-rich. With the exception of some medieval churches, buildings are normally of 17th century and more commonly later date. Occasional simple stone field barns with stone slate roofs are found in field corners.

### **Transport, access and recreation**

There is a comprehensive network of major and minor roads as well as public footpaths and bridleways linking the settlements together. The Roman fort at Brough sits at a strategic junction between the Hope and Edale valleys, and Bradwell Dale. A Roman road links Brough to Melandra near Glossop, and an ancient route known as the Portway also runs through Brough.

An unusual feature of some of the paths around Winster, linking to Birchover, is that they are paved with gritstone flags. Additionally, the main railway line between Sheffield and Manchester runs through the Hope Valley.

## Estatelands LCT

An enclosed, estate landscape where views of agricultural land are framed by discrete blocks of woodland and scattered field boundary trees set within a varied, undulating topography. This is a landscape of villages, with historic halls and houses surrounded by parkland.

This landscape is found in three blocks, the largest centred on Pilsley, Haddon and Hassop. The remaining two areas include Chatsworth House and gardens east of the Derwent and Stanton Hall in the south.

### Key characteristics

- A varied undulating topography with steep slopes in places
- Large historic halls and houses set in designed parkland
- Villages and outlying estate farmsteads and field barns
- Regular pattern of medium large sized fields
- Large blocks of plantation woodland
- Patches of acid grassland and bracken on steep slopes

### Geology, landform and soils

This is a landscape where the underlying geology, mainly a mixture of shales and interbedded gritstone, gives rise to a dissected, undulating and, in places sloping, landform with low ridges. A small isolated limestone ridge at Cracknowl Pasture, to the north of Bakewell, forms part of this character type.

The pattern of soils is varied, reflecting the mix of rock types that define the character of the landscape in this area. Soils comprise a mixture of slowly permeable, gleyed soils overlying the shales and shallower, free-draining soils over gritstone.

### Species and habitats

This is an area of improved permanent pasture with mature hedgerow trees, drystone walls and hedges. In places, on the poorer soils, there are remnants of acid grassland with patches of bracken; in particular this can be found on northern slopes around Pilsley. Elsewhere there are isolated patches of semi-improved grassland alongside tracks and edges of fields. Woodland is a mixture of conifers and broadleaved species.

### Tree cover

Views are filtered by the extensive tree cover throughout the area. This is found as a mixture of large plantation coniferous woodlands, discrete linear shelter belts, tree screens and scattered mature boundary trees. There are many mature scattered parkland trees, with some veterans, which are very important for the character of this landscape. Ash is the dominant native tree along with oak, sycamore, beech and hawthorn. Spruce, pine and larch are to be found in the plantations.

### Land use

This is a landscape of intensively managed permanent pasture in a regular pattern of fields with extensive coniferous woodlands and parkland. Stock rearing for beef and, in particular, dairying is an important land use. Much of this landscape is still owned and managed by the estates. Parkland is one of the key features of the estatelands, with important designed landscapes at Chatsworth, Haddon, Hassop and Thornbridge. The parkland at Chatsworth contains a wealth of well-preserved earthworks and buried features including tracks, ridge and furrow and waterlogged earlier riverside garden layouts.

## **Enclosure**

This is a landscape of medium to large sized fields enclosed and frequently modified at a variety of dates from at least the 17th century including the former medieval deer park around Haddon Hall. This has formed a complex mosaic of features.

Often changes were somewhat greater than in other landscapes because estates had the wealth to make 'improvements' in line with contemporary thinking on good agricultural practice. Perhaps the most changed landscape is at Birchill where fields have come and gone on a regular basis, with the current large-scale open landscape created in the 19th century. Boundaries are variable throughout this landscape being a mixture of limestone or gritstone walls and thorn hedges.

## **Settlement, buildings and monuments**

There is a strongly nucleated pattern of discrete villages, large halls and outlying farms. The villages and several of the smaller settlements and halls have medieval origins, although the majority of today's buildings date from the 17th century onwards. Most vernacular buildings are constructed of sandstone or gritstone except where relatively close to the limestone outcrop. There are large numbers of estate buildings, both in the villages and in the countryside, which have architectural details beyond the local vernacular styles, including houses, lodges and outbuildings. Edensor was extensively remodelled in the 1830s-40s to create an architect-designed model village. Impressive estate-designed buildings are also found at Hassop and Pilsley.

The large halls and houses in the area were built using the materials available locally and in styles popular at the time. Construction of Haddon Hall started in the late 12th century and was added to at various dates; Chatsworth House has impressive fronts dating from the late 17th to 19th centuries but the 16th-century core of the house survives; Hassop Hall was rebuilt in the 19th century.

These were all constructed using locally quarried and dressed sandstone. However, Thornbridge Hall, extensively modified in the 19th century, was constructed using limestone, reflecting the easy access to nearby limestone quarries.

## **Transport, access and recreation**

There is a network of narrow winding lanes and footpaths linking settlements. Major routes also cross the valley in places and were often first created as turnpike roads, linking the Eastern Moors landscapes in the east with the White Peak landscapes to the west. The former railway line between Buxton and Matlock has been converted into the Monsal Trail, an important recreational route. The line was set in a tunnel to avoid disturbing the parkland around Haddon Hall.

## **Riverside meadows LCT**

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

**The riverside meadows form a narrow continuous strip of floodplain, one to two fields wide, adjacent to the rivers. This landscape stretches from just below the Ladybower reservoir on the River Derwent in the north, includes Hope on the River Noe and Bakewell on the River Wye to the west, down to Matlock in the south.**

## **Key characteristics**

- A flat alluvial river corridor with seasonally waterlogged alluvial soils
- Meandering river channel with shingle beds and marginal vegetation

- Grazing meadows, often with patches of wet grassland, marsh and fen
- Dense waterside and scattered hedgerow trees
- Regular pattern of small to medium sized pastoral fields divided by hedges
- Mills with mill races, weirs and ponds

## **Geology, landform and soils**

A key feature of this landscape is the flat alluvial floodplain across which the rivers Derwent and Wye meander as they flow downstream. These rivers have developed mainly on the relatively soft shales but in places flow across harder gritstones. There are hollows within the floodplain which reflect the past courses of the river.

The soils are clayey loams, derived from the underlying alluvial deposits. These have built up over many years as the river has flooded and deposited the material it had been carrying.

## **Species and habitats**

Some areas on the floodplain are permanently waterlogged and some wet hollows retain flood water for long periods of time. These have created linked patches of wetland and marshy riverside vegetation associated with the meandering river although much of the land has been improved.

## **Tree cover**

Tree cover is relatively extensive throughout the landscape type and has a high visual impact. It is often confined to river banks which are densely lined with alder and some willow. This almost continuous belt of riverside trees creates an intimate landscape when combined with scattered hedgerow trees of oak and ash across the floodplain. In places there are small copses of willow carr and some poplars.

## **Land use**

Because of heavy soils and seasonal waterlogging land use is permanent pasture, grazed by cattle and sheep. Part of Chatsworth Park with its weir, mature trees and derelict mill sits within the floodplain, and this includes traces of former watermeadows and earlier gardens. A series of historic mills, mill races, ponds and weirs are also found along the rivers, relating to a variety of processes including corn milling, stone working and lead smelting.

## **Enclosure**

The rivers are usually fringed by a regular pattern of small to medium sized fields, often in places only one to two fields wide. Fields are enclosed by mainly straight thorn hedges.

## **Settlement, buildings and monuments**

This is mainly an unsettled landscape with occasional farmsteads and some modern development. Historically, settlement would have been restricted on the floodplain due to seasonal flooding, but a series of local water-powered flour mills were built, in the medieval period as at Bakewell and Ashford. This was supplemented during the Industrial Revolution with large textile mills at Bakewell, Calver and Bamford, although these have now been converted into apartments, modern industry or other uses. Associated features survive, including weirs and leats, in and alongside the rivers. Arkwright's Lumford Mill, built in Bakewell in 1777, was the first he had designed to harness river water power. Significant elements of his water management system survive.

Where there is settlement it is usually farmsteads, and buildings are predominantly gritstone with stone slate roofs. In places there are limestone rubble constructed buildings with blue slate roofs.

## **Transport, access and recreation**

Most historical routes following the valleys avoided the floodplain and the wet boggy treed landscape. However, routes do go across the floodplains; crossing the rivers at traditional bridges, sited where flooding problems were least acute.

# The Eastern Moors

## **Introduction**

The Eastern Moors is a sparsely settled area of gritstone uplands lying to the south-east of the Dark Peak plateau. The area is a continuation of these Dark Peak uplands but the broad, upland plateau character associated with the Dark Peak alters to a somewhat lower landscape with a narrower moorland top and main western shelf, and a greater proportion of enclosed moorland. Edges are a characteristic of the area, mostly running along the north-south axis of the Moor's western edge. This is an elevated landscape that drops away to the Derwent Valley to the west, the Derbyshire Peak Fringe to the south and the Yorkshire Peak Fringe to the east. The Eastern Moors provides a number of vantage points over the city of Sheffield in the lower lying eastern landscape. This landscape contains a nationally-significant concentration of prehistoric monuments, settlement and field systems.

## **Physical influences**

The Eastern Moors is an area of moorland and owes much of its character to the underlying coarse sandstones from the Millstone Grit series of the Carboniferous period. As the process of sedimentation that formed the limestones of the White Peak was taking place, a land mass to the north (now Caledonia in Scotland) was shifting: uplifting, folding and tilting towards the south. This created rivers and deltas carrying sediments of fine silt, pebbles and sand into the shallow sea creating mudflats and low lying sand banks. The material that was deposited by these rivers compressed over mudstones through sedimentation to create the shales, siltstones and sandstones known as Millstone Grit. Chatsworth Grit dominates the Eastern Moors but is interspersed with other gritstone from the Millstone Grit series. To the south, and more significantly, in the eastern parts of the Eastern Moors the Coal Measures overlie the gritstone and consist of grey shales, siltstones and sandstones interspersed with thinner beds of coal and ironstone.

The hard Millstone Grit is most influential on the land form and is interspersed with beds of softer shales. The erosion of these rocks has given rise to a distinctive topography of high moors with gritstone outcrops, and 'edges', such as Stanage. These edges are thought to have developed through freeze-thaw, rock fall activity and down washing from streams during peri-glacial times.

The upland tops are covered in peaty mineral soils and occasionally blanket peat although the Eastern Moors generally has a much thinner peat layer, contrasting with the Dark Peak where blanket bog is more dominant. Hence the extensive peat gullies and hags characteristic of the Dark Peak are largely absent here. There are localised patches of thicker peat on the Eastern Moors, mainly in shallow basins such as on Totley Moss. On the Eastern Moors there is some peri-glacial head deposit formed through freeze-thaw activity on wet surface material, eroding it and ensuring that its constituent parts become intermingled before sliding down slopes over hard frozen surfaces. During tundra peri-glacial conditions wind erosion damaged the Millstone Grit, creating a dust, known as loess, which was deposited across the Peak District.

## **Ecological influences**

For the most part the soils of the Eastern Moors are impoverished with a mixture of damp humic gleys, humic podzols, podzolic or shallow brown soils. As a result, semi-natural vegetation is a key characteristic of many Eastern Moors landscapes, especially on the open moors and moorland slopes. Here the shallower peats and mineral soils mean that heather and grass moorland predominate; this is in contrast

to the Dark Peak where deeper peats are far more widespread giving rise to extensive areas of blanket bog. Only on Ringinglow Bog in the north is cottongrass-dominated blanket bog extensive, and this lacks the network of drainage channels or 'groughs' so typical of the Dark Peak moors. Heather moorland was typically managed for grouse shooting in the 19th and 20th centuries but this is now much less prevalent. Other Dwarf shrubs such as bilberry and cowberry can co-dominate with heather. Areas of grass moorland dominated by purple moor grass occur in places and may reflect past heavy grazing or even agricultural treatment. Moorland birch and willow scrub, largely absent from the more exposed Dark Peak moorlands, occur locally, and birds such as woodcock, tree pipit and redpoll favour such areas.

Gritstone rock outcrops on the moors occur either as massive gritstone edges, as at Stanage, Burbage and Birchen Edges, or as smaller outcrops and boulder strewn slopes. These can support a lichen flora of some importance locally, and also provide nesting sites for birds such as ring ouzel. Bracken is often particularly extensive on sloping ground below the edges, as well as being present elsewhere on the moors. Whinchat and, increasingly, stonechat, are found in such areas.

Moorland basins ('sitches' or 'sicks') are drained by streams which flow off gently in shallow valleys to the coal measures to the east, or to the west where they drop more rapidly as fast flowing streams where they descend into the Derwent Valley. Bogs and flushes associated with streamhead basins and streamside flushes often support a varied flora including species which are typically scarce in the Dark Peak, such as greater tussock sedge, bogbean and marsh cinquefoil, while rushy areas are important for reed buntings.

At the southern end of the area large blocks of enclosed pastureland and conifer plantation occur around Matlock Moor. The enclosed pastureland extends northwards along the eastern edge of the moors from Gladwin's Mark to Freebirch, interspersed with pockets of arable land and relics of heathland vegetation. These areas are of particular value for birds such as lapwing, curlew and yellowhammer.

## **Human Influences**

The Eastern Moors is now relatively unsettled due, in part, to the altitude but also because of the setting aside of this land in the 19th century, by large estates, for grouse shooting. It has been managed for the needs of humans, mainly as rough grazing, since prehistoric times.

Well preserved archaeological remains of Bronze Age and Iron Age Settlements, field systems and ceremonial monuments are common, located extensively across the Eastern Moors; these are a nationally important resource and represent some of largest and best preserved examples in the north of England. The moors are lower than the Dark Peak moors further north and thus were more suitable for farming in prehistory, although the soils later deteriorated due to climatic change, possibly combined with over-farming. Evidence of settlement and farming is widespread at altitudes between 250 and 350 metres: radiocarbon dating from a number of sites, combined with culturally-distinct artefacts, show that sustained activity took place over much of the last two millennia BC. The upstanding remains often comprise low heaps of stone cleared into cairns and along the courses of past field hedges and fences; these stony remains can be difficult to find where heather and bracken is high.

There are many small prehistoric ritual monuments of a variety of types on the Eastern Moors, presumably built by the local farming population. These include stone circles, ring cairns and other stone settings, all found close to the settlements and prehistoric fields.

A large number of round barrows and smaller funerary cairns are scattered more widely. There are also two small but rare funerary cairnfields on Gibbet Moor and Ravens Tor, which are very different in character to the many agricultural cairnfields.

On Gardom's Edge there is a big enclosure with a large but low stone bank. While similar in character to Neolithic sites elsewhere, radiocarbon dating shows that it is Later Bronze Age in date and contemporary with one phase of the prehistoric farming; it is not defensive and its purpose is unknown. Carl Wark,

between Burbage and Stanage Edges, is a smaller but undated monument, with a high rampart suggesting it is an unusual Iron Age hill fort.

Since the end of prehistory most parts of the Eastern Moors have not been used agriculturally except for rough grazing, leaving soils undisturbed, which explains why so much from prehistory has survived. Only restricted parts of the Eastern Moors were farmed more intensively in the medieval period. Important abandoned medieval settlements survive at Lawrence Field and Sheffield Plantation, while at the southern end of the Eastern Moors, adjacent to Fallinge, Burley Fields and Farley, there are three areas of enclosed land that were farmed in medieval times and are still in use today.

Braided hollow-ways, often deeply eroded into the land, are visible running across the moorlands. Some of these were specifically for local traffic to commons, quarries and mines but the majority were through routes of medieval to late 18th century date, from the Peak District to the lowlands to the east. There were many such routes and they were used for exporting products such as lead, millstones and cheese, and for cross-Pennine trade in commodities such as salt, ceramics and industrial products from the iron and steel centres around Sheffield and Chesterfield. These traditional routes, many with their distinctive early 18th-century waymarkers, were replaced in the 18th and 19th century by the turnpike road network, which formed the basis for the main modern routes that now cross the Eastern Moors. Not all turnpikes and similar industrial roadways are still in use, as for example the 18th-century paved cartway running across Stanage Edge. In several places routes were diverted from the straight 18th-century roads to more sinuous roads with lesser gradients that could be passed in winter.

Millstones were made at many sites along the main scarps of the Eastern Moors for a national market from at least the 13th century through to the 20th century. There were important production centres of domed millstones, made until the 18th century, above Baslow and Hathersage. In the 19th and 20th centuries production changed and stones of different form were used for milling animal feed, as pulpstones for paper manufacture and as grindstones. Good examples of such quarries exist at Stanage Edge and on Bole Hill above Hathersage. Other quarries, such as those above Beeley, were primarily used to supply building stone. Broken and unfinished millstones, troughs and gateposts are still visible in quarries and amongst scattered boulders below many of the escarpments.

Coal mining took place on the Eastern Moors from the 16th century, and possibly earlier, until the 19th century. Many shaft mounds for shallow mines exist around Robin Hood, close to Beeley Warren and near Owler Bar. In the medieval period and into the 16th century the Eastern Moors was extensively used for lead smelting in bole hearths. Despite their frequency, there is little to see today of these 'bonfire' sites except the occasional scatter of slag in patches of polluted poorly-vegetated ground. Ancient valley-side woodlands were managed for the production of charcoal and white coal, as fuel for lead production.

The Eastern Moors were the focus for military training and other activities during both the first and second world wars. Traces in the landscape include mortar and bullet scars and hand-dug weapons pits and practice trenches – some of the latter are scheduled monuments. There is a bombing decoy site on Houndkirk Moor.

The edges of the Eastern Moors are famed for their extensive rock climbing routes and are often busy with climbers. The Peak District, including the Eastern Moors, played an important role in its development as a sport accessible to all social classes. Prior to the 1950s rock climbing was a socially elite pastime with expensive gear and difficulties accessing rock faces. Climbers such as Joe Brown and other working class men from Manchester and Sheffield developed a new, less formal approach to climbing with a focus on the Dark Peak and the Eastern Moors. Eventually these climbers evolved the sport, developing gear and climbing styles that are still used including the sport of bouldering which uses the large boulder-strewn slopes below the rock faces.

## Sense of place

The Eastern Moors has a similar sense of place to the Dark Peak but the sense of remoteness and isolation, though sometimes present, is weaker as the moorlands here often afford wide views over the adjacent settled landscapes of the Derwent Valley to the west and the Derbyshire Peak Fringe and urban Sheffield to the east. The proximity of large urban areas, including Sheffield, Chesterfield and Matlock, and the frequent roads crossing the Eastern Moors further reduce the sense of isolation and remoteness compared with much of the Dark Peak. The edges, such as Stanage and Burbage, are celebrated climbing spots, often providing expansive vistas.

Although the landscape has a history of significant human activity, as evidenced through archaeological remains and occasional shooting infrastructure, the sense of place today on the tranquil moorland contrasts with the busy quarrying and mining landscapes that once existed across the Eastern Moors.

The moorland tops have dark hues due to the weathered gritstone bedrock, exposed in places along the edges, and the dark purples, oranges and browns of heather. This creates a sense of wildness that contrasts with the brighter greens of improved land in the landscapes to either side of the moors. The lack of settlement or activity ensures that the sense of remoteness prevails in most locations, although the edges are popular destinations for climbers and walkers.

Three distinct landscape character types have been identified in the Eastern Moors. They have been defined by their broadly repeating patterns of natural elements and cultural factors:

- **Open moors**
- **Moorland slopes & cloughs**
- **Enclosed gritstone uplands**

## Open moors LCT

An open, undulating gritstone moor and heathland landscape with mineral soils and shallow blanket peat covered by heather moorland and grass moor. This is an unsettled landscape with wide views to distant surrounding hills and valleys and a sense of remoteness and space.

This is a visually prominent landscape which covers a large area of the Eastern Moors, with heather moorland and localised thick blanket peat such as at Totley Moss and Leash Fen.

### Key characteristics

- Undulating unsettled gritstone summits with large gritstone edges, scattered rock outcrops and tors
- Unenclosed heather and grass moorland, with areas of birch and willow scrub
- Extensive and nationally-important archaeological evidence from prehistoric and later activity
- Thin impoverished soils with some deposits of peat

## Geology, landform and soils

The open moorland is a large scale, moderately high and exposed landscape where the underlying Millstone Grit strongly influences the landform. The gritstone bedrock is hard and slowly eroded, giving rise to the moderately undulating landform of the highland summit separated from the lower western shelves by steep edges.

To the south and, more significantly, in the eastern parts of the area the Yorkshire Coal Measures overlie this gritstone bedrock. There are areas of head deposits (a mixture of clay and boulders) created during peri-glacial periods by the freeze-thaw of surface material.

Much of the open moorland is underlain by impoverished shallow mineral soils and thin, dark peaty soils down to an ironpan overlying podzolised sands. Deep peat has accumulated in shallow basins as at Leash Fen, Lucas Moss and Ringinglow in contrast to the Dark Peak where it occurs as extensive deep blanket peat deposits subject to gullyling and hagging as a result of erosion.

### **Species and habitats**

Much of this landscape is covered by dwarf shrub heath dominated by heather but including variable quantities of crowberry, cowberry and bilberry, particularly on more mineralised soils where the peat is thinner. Here, past grazing and burning management mean that heather tends to be the dominant species on the moorland. Where the peat is wetter, other species such as cottongrass and purple moor grass are more prevalent. Flushes and bogs associated with headwater basins ('sitches' or 'sicks') and moorland streamsides often support a rich flora with a number of local species typically rare or absent in the higher Dark Peak.

### **Tree cover**

This is generally an open landscape with expansive views over the adjacent valleys. Historic grazing pressures have inhibited tree growth and regeneration although there are some localised patches of birch and willow scrub on lower lying moors. There are also a number of localised plantation woodlands, possibly associated with past industrial needs. Sheffield Plantation, on the western edge of the area near to Longshaw Lodge, was planted prior to 1840 and established by the Sheffield Planting Company. Other woodland, as on Ramsley Moor, Birchen Edge and Gardom's Edge, is not planted but the result of natural regeneration from seed sources on lower adjacent ground.

### **Land use**

This landscape generally has a low agricultural value being used predominantly for rough grazing, and in places grouse rearing. Areas of heather moorland are maintained through regimes of cutting, burning and grazing by sheep and sometimes cattle.

Historically this landscape would have supported a range of industrial processes including coal mining, quarrying and bole hearths for smelting lead, the latter often being sited on gritstone edges to take advantage of prevailing winds. . This would have resulted in a landscape very different to that of today. There is still much evidence of these past medieval and post-medieval industries. Abandoned millstones at the foot of the most popular gritstone crags are an iconic symbol of the National Park today.

Parts of the Open Moors bear significant evidence for military training through the 20th century. The WWI training area on Hallam Moor near Redmires Reservoir is large and well preserved complex of fire and communications trenches, gun emplacements, weapon's pits and field kitchens. It is associated with the nearby Redmires Camp (later also a WWI prisoner of war camp). A Starfish bombing decoy, designed to protect Sheffield in WWII, lies off the track crossing Houndkirk Moor.

### **Enclosure**

This is a largely unenclosed landscape where the lack of enclosure creates dramatic and expansive open views. Historically this landscape would have consisted of open wastes and commons. Some parts of the moorland, as below Harland Edge, are subdivided by 19th century walls which divide it into ownership and management units. Smaller regularly laid out enclosures of similar date are found occasionally, adjacent as for example on the western edge of Gibbet Moor and around Fox House. Occasional isolated, and now often ruined, rectangular enclosures surrounded by moorland were used for stock gathering and growing oats.

### **Settlement, buildings and monuments**

There is extensive evidence of past settlement on the open moors dating to the later prehistoric period, and occasionally to the medieval period. Features include enclosures, house sites, field systems, clearance cairns, ceremonial monuments and rock art. Extensive and well-preserved complexes of

prehistoric activity are found on Bamford Moor, Hathersage Moor, Big Moor, Ramsley Moor, Stoke Flat, Gardom's Edge and Gibbet Moor. Medieval settled and farmed landscapes are found at Lawrence Field and Longshaw Estate. These are archaeological landscapes of national importance.

Today this is a largely unsettled landscape with built features existing only locally, often as infrastructure for shooting and stock management. Some are simple livestock barns, ruined shooting cabins and gamekeepers' lodges; but Longshaw Lodge is exceptional, built as a comfortable shooting lodge by the Duke of Rutland to offer hospitality to guests. A similar example of guest accommodation is hidden away in plantations above Redmires Reservoirs at Stanage Lodge. Another atypical building is the reservoir keeper's lodge next to the old Barbrook Reservoir. There is also a memorial to the Duke of Wellington, to Baslow Edge, matched by another to Nelson on Birchin Edge, both above Baslow, erected in 1866.

### Transport, access and recreation

Transport is a relatively limited feature of this landscape character type, although several main roads cross from east to west connecting places such as Sheffield and Chesterfield with the Peak District. A complex infrastructure of routes once crossed the moorland and can still be identified as earthworks and holloways worn deeply into the land surface. Historic stone guidestoops or waymarkers are found at intervals along some of these routes. Much of the open moorland is open access land and only accessible on foot. Significant areas of this landscape are owned and managed by the Peak District National Park Authority, Sheffield City Council, Chatsworth Estate and the National Trust.

### Moorland slopes & cloughs LCT

Steep slopes and dramatic gritstone edges rising to open moors, with widespread rough grassland, bracken and heather moor, grazed by sheep. This is a wild unsettled landscape with exposed views over lower ground.

This landscape occurs as a series of narrow strips around the edge of the open moorland core, on both the west and the east.

### Key characteristics

- Steep slopes rising to precipitous edges with prominent gritstone outcrops and spreads of boulders beneath
- Rough acid grassland, bracken and heather moorland grazed by sheep
- Thin soils over gritstone and coal measure bedrock with relict quarries, mining and hollow-ways
- Popular walking routes and paths, with exposed views over lower ground

### Geology, landform and soils

This is a sloping landscape that is strongly influenced by the underlying Millstone Grit geology and defined by steep upper slopes and edges that fringe the open moorland, such as at Burbage and Stanage Edges. The resulting landform creates a sense of elevation with distant and panoramic views over surrounding countryside. There are outcrops of gritstone, most notably where it forms distinct edges with precipitous rock faces and boulder strewn slopes. Several fast flowing streams draining the moorlands above have incised into the slopes where they descend into the Derwent Valley to the west, forming short side valleys as at Burbage Brook and Upper Hurst Brook. The Millstone Grit is interspersed with beds of softer shales which erode to leave the upstanding gritstone edges and sloping land. On the east of the moors the coal measures influence this landscape character type, particularly below Ramsley Moor and Blacka Hill.

Soils are coarse, loamy and very acid over the gritstone bedrock. Surface water drainage is often impeded by the formation of a thin ironpan and in less steeply sloping areas the soils can have a wet peaty surface horizon. There are areas of head deposit along some of the edges such as White Edge, Harland Edge and Birchen Edge.

## **Species and habitats**

This is a landscape with widespread patches of semi-natural vegetation, usually comprising a mixture of heather moorland, with areas of purple moor grass and bilberry, or acid grassland. Extensive areas of bracken are often associated with the moorland slopes, and springs and flushes, important for their plant and insect life, are frequent.

## **Tree cover**

The grazing on these moorland slopes has restricted tree growth and regeneration. However, scattered trees and scrub occur on moorland slopes as at White Edge. Plantation woodlands can also be found on the moorland slopes, such as Stanage Plantation. Bunkers Hill Wood is a plantation woodland dating from the early 18th century that was associated with Chatsworth's former deer park.

## **Land use**

Owing to its elevation and poor quality soils, this is a very marginal agricultural landscape used primarily as rough grazing. The slopes are of outstanding importance for a range of recreation activities including rock climbing on the gritstone edges, bouldering, paragliding and walking. Historically, quarrying would have been a major activity to the west, with coal mining (defined by distinctive bell pits) on the eastern side of the moors and on some edges in the west Quarried stone would have been used for millstones, pulpstones, grindstones, troughs, and as a building resource, both for blocks and detailing, such as lintels. A monument to Nelson takes advantage of the topography and three prominent rocky outcrops on the top of Birchen Edge to enhance its landscape impact.

## **Enclosure**

Large areas of this landscape character type remain unenclosed. There are some areas where enclosure was planned but did not occur: the land was allotted but remained open and unenclosed. Where enclosure has taken place it tends to have been undertaken during the 18th century and occurs generally on the eastern fringe. A handful of field enclosures could have medieval origins. Plantation woodland on the slopes first occurred around the time of Parliamentary enclosure, although this was not the case with Bunkers Hill Wood (see above). Where boundary features exist they are gritstone drystone walls.

## **Settlement, buildings and monuments**

This is a sparsely settled landscape with very occasional buildings, including Bolehill Lodge, and isolated gritstone farmsteads, and cottages or inns, such as the Peacock Inn above Owler Bar, along historic transport routes as the only forms of settlement. Some of these date from the medieval period. There are some field barns and stock pens within the landscape, associated with sheep farming and constructed from the local Millstone Grit, and there are traces of abandoned farmsteads. Although very sparsely settled there is more settlement on the eastern than the western slopes of the Eastern Moors.

## **Transport, access and recreation**

Transport is a relatively limited feature of this landscape character type, although several main roads cross through it connecting to places such as Sheffield and Chesterfield. These may have medieval origins, having been improved into turnpike roads before being further formalised into the present roads. Today, most of the slopes are open access land and are only accessible on foot. Key walking routes often follow the gritstone edges that form the boundary between the open moors and the slopes and cloughs. Some of the most well-visited routes include those along Stanage, Burbage, and White Edges.

## **Enclosed gritstone upland LCT**

An enclosed upland pasture landscape associated with high, gently undulating moor tops, sloping in places to higher ground. This is a landscape of isolated stone farmsteads, regular fields with patches of acid grassland enclosed by drystone walls, and straight roads. Boulder fields and rocky outcrops are a

feature in places, often associated with patches of remnant moorland vegetation. Plantation woodland is also a localised feature.

To the north this landscape occurs in discrete blocks on a similar elevation or on lower land running down from the open moorland. However, it is the dominant character type in the lower lying southern area of the Eastern Moors.

### Key characteristics

- Rolling uplands with some steeper slopes
- Remnant patches of rough land with bracken and heather
- Regular pattern of medium to large pastoral fields and rough grazing enclosed by gritstone walls
- Straight roads with wide verges of grass and, in some places, heather Isolated gritstone farmsteads with stone slate roofs with tree groups for shelter
- Extensive conifer plantations around Matlock Moor
- Thin mineral soils over gritstone bedrock

### Geology, landform and soils

This landscape is associated with broad, gently undulating gritstone uplands in places rising steeply to higher open moorlands. The underlying bedrock is Millstone Grit, which is sometimes exposed as rock outcrops particularly on the steeper slopes where it sometimes forms small gritstone edges. The Coal Measures also outcrop in this landscape in the east particularly over Grange Hill and to the east of Hare Edge.

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

### Species and habitats

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

Where the soils are wetter species such as purple moor grass can exist. There are some patches of soft rush on the wetter soils, which often support small populations of breeding birds such as snipe. In the south, on Matlock Moor there are extensive areas of coniferous plantation woodland which can support limited plant life due to the shading created by conifers.

### Tree cover

Tree cover tends to be limited to the, in places extensive, plantation woodlands around Matlock Moor (Farley Moor, Upper Moor, Bottom Moor and Flash Lane) to the south. Elsewhere grazing has restricted natural tree growth and regeneration. However, there are occasional tree groups, generally adjacent to farmsteads and planted to create shelter around properties, using broadleaved species such as oak, ash and sycamore. There are also some shelterbelts and occasional blocks of 19th or 20th century coniferous woodland. Plantation woodlands are a strong characteristic in some areas, such as at Stand Wood above Chatsworth.

### Land use

This is a landscape of mostly improved or semi-improved permanent pasture with sheep and cattle grazing and some rough grazing except in the south, on Matlock Moor where plantation woodland is the dominant land use. Soils are mostly impoverished and some fields are dominated by rushes or are reverting to moorland habitats. Historically, this landscape has supported coal mining and small scale quarrying in some areas. Baslow Colliery, near Robin Hood, was the largest mine and may have been

worked from medieval times, but was at its height during the 18th and early 19th centuries. The coal is likely to have been used for local industrial and domestic markets. Extensive bell pit remains are still visible.

### Enclosure

Land was enclosed from moorland that was often waste and commons prior to enclosure. This is a landscape where much enclosure followed Parliamentary Enclosure Awards dating from the late 18th and early 19th centuries. Here there are medium to large regular fields enclosed by gritstone drystone walls. The grid-based regular pattern of fields around Rodknoll Lane is particularly striking. There are some areas of more ancient enclosure, such as around Robin Hood and to the south, around Fallinge, Burley Fields and Farley where there are areas of enclosed land that was farmed in medieval times. This type of enclosure tends to have a slightly smaller and more irregular form than land created through Parliamentary Enclosure. Some private enclosures were also created, such as the large fields above Chatsworth, that were created in about 1800 when the old deer park was enclosed, and immediately to the north when fields were re-organised in the 19th century.

### Settlement, buildings & monuments

Although this is a strongly post-medieval landscape in character, small pockets of prehistoric or medieval field systems and monuments survive in enclosed areas of moorland, such as around Moorside Farm below Birchen Edge. This lies adjacent to irregular fields of unknown enclosure date. Settlement is dispersed within this landscape. Gritstone farmsteads with stone slate roofs, often dating from the time that the landscape was enclosed from the 18th and 19th centuries, are the most frequent settlement type. There are several sites of former outfarms that are now lost from the landscape. Higher up, towards the open moorland, the landscape is often unsettled. In some areas, such as Fallinge, Burley and Farley, the hamlets have medieval origins but the buildings are later replacements in stone dating from the 17th century onwards.

### Transport, access and recreation

Where roads exist they tend to be straight with even verges, often a characteristic of roads associated with Parliamentary Enclosure. In places larger, busier roads cross the landscape, which are often former turnpikes. Often little now remains of the older packhorse routes that crossed these areas before they were enclosed.

### Enclosed gritstone upland LCT

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

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

### Key characteristics

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

### Geology and landform

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

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

### **Soils and vegetation**

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

### **Tree cover**

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

### **Land use**

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

### **Enclosure**

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

### **Settlement, buildings and monuments**

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

### **Transport, access and recreation**

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

## **The South West Peak**

### **Introduction**

The South West Peak is an area of upland and associated foothills in the south-west part of the Peak District National Park. It is bounded by the distinctly different limestone landscapes of the White Peak to the east and the extensive lowlands of the Cheshire and Staffordshire Plain to the west and the Churnet Valley to the south. To the north is the more industrial landscapes of the Dark Peak Western Fringe.

## **Physical influences**

The landscape of the South West Peak has been shaped by the structure and erosion of the underlying Millstone Grit. The sediments were laid down in the Carboniferous era and consist of a cyclic succession of shales, siltstones, and cross-bedded sandstones (locally called gritstones). These represent river sediments deposited in a large delta complex, akin to the Nile Delta today. Sediments were deposited on the summit of the delta and on its moving flanks. As sea level rose and currents shifted, the delta sediments were re-deposited in large gritstone masses which can be seen in the area.

The Millstone Grit is strongly folded in the South West Peak; the dipping beds of gritstone create variation in the landform and define rocky ridges and slopes. The great folds in the rocks have left exposed Coal Measures in some areas, notably in the Goyt Valley and basins such as Goldsitch Moss.

Although the South West Peak was almost certainly covered by glaciers in the early Quaternary (the last two million years), there is little evidence in the landscape today. During the last (Devensian) glaciation, the area was not covered by ice but was strongly affected by the cold conditions on the edge of the ice sheet. These conditions led to rapid erosion of the landscape giving rise to the steep slopes, rocky tors and edges that we see today such as at Ramshaw Rocks and the Roaches. Sediments eroded during these cold conditions were deposited on the valley slopes.

With a rainfall of over 140 cm a year, Axe Edge is one of the major watersheds of England. It is the source of five rivers – the Dove, Manifold, Goyt, Dane and Wye. The rivers and their fast flowing tributaries have cut steep sided rocky cloughs through the upland landscape which broaden into alluvial valleys in the lowlands. Much of the highest land in the upland area of the South West Peak is covered by deposits of blanket peat, which give a smooth rounded appearance to the landscape. The peat is cut by narrow groughs at the heads of streams.

## **Ecological influences**

The high altitude and heavy rainfall on the moorland hills has created acidic soils dominated by moorland vegetation. On the high moorland plateau of Axe Edge and parts of Goyt's Moss in the north, large areas are covered by blanket bog. The thick peat, which is between 0.5 metres and 2 metres thick, developed during the last 10,000 years, with the maximum growth during a warmer period, 8,000 to 6,500 years ago. Human induced clearance of the landscape and the introduction of grazing animals also played their part. The blanket bogs are characterised by cottongrasses with patches of heather, bilberry and crowberry and support breeding birds such as the golden plover. On the lower moors, where the peat is thin, or there are peaty mineral soils, dry heath is the characteristic habitat with a mixture of dwarf shrubs, especially bilberry and heather. In areas managed for grouse shooting the heath is dominated by heather. These upland heaths support birds such as red grouse, curlew, merlin and short eared owl. Gritstone edges and tors are locally important features of the open moors, most notably along the prominent gritstone ridges of The Roaches and Ramshaw Rocks/Gib Torr, and there are also outcrops of gritstone on steep clough sides. The exposed rock supports important habitats for lichens and ferns.

The rocky outcrops support breeding birds including raven and small numbers of ring ouzel, with wheatear and winchat on the slopes below. Small patches of willow scrub occur locally in wetter areas on the lower moors, and support a rich flora.

On better land, and where the moorlands have been enclosed and heavily grazed, acid grassland is more common. This is particularly characteristic of the Cheshire hills in the north-west, such as Shutlingsloe, Midgley and Birchenough Hills, Bosley Minn and Sponds Hill. A range of types of acid grassland can be found, with sheep's fescue, common bent and mat grass dominating better-drained slopes. Other grasslands dominated by purple moor grass occur in wetter areas, with extensive examples at Lyme Park. Bracken beds are frequent features of the acid grassland, particularly on dry slopes. The acid grasslands support a range of bird species including curlew, snipe and skylark. Mires are associated with the gently sloping land and of upland enclosed pastures.

The steep sided cloughs that cut through the landscape are often characterised by scattered trees or linear woodland. Woodlands are also found in blocks on the slopes in the west of the area and tend to be oak dominated, with some downy birch, silver birch and rowan. Holly and hazel are found in the under storey in the more lowland woodlands. The ground flora includes wavy hair-grass and bilberry. On mineral-rich soils on the lower slopes, a more diverse flora is found with ash in the canopy and a rich ground flora including ramsons, wood anemone and bluebell. Alder occurs along streams. The woodlands support breeding redstart, tree pipit, wood warbler, lesser spotted woodpecker and pied flycatcher. There are also large plantation woodlands that occur in the Goyt Macclesfield Forest; these were often planted on former open heath or grassland, although some have replaced semi-natural woodlands and retain natural wooded character in patches near flushes and streams.

In the enclosed farmlands on lower slopes and valleys, there is a strong pastoral character which includes some areas of interesting neutral grasslands. Wet rush-pasture with soft rush and Yorkshire fog is particularly widespread and characteristic, and is important for ground-nesting waders such as curlew, snipe and lapwing. Many areas of pasture have been reseeded and are managed intensively for silage production so unimproved grasslands and hay meadows are relatively rare. The meadows have a range of grasses mixed with oxeye daisy and knapweed, as well as species typical of more northerly meadows such as great burnet and lady's mantle. Acid fescue-bent pastures can support a rich flora including local species such as moonwort and mountain pansy. Fields are often enclosed by hedgerows on the lower slopes, including some mixed species hedgerows with holly.

Acid and basic flushes occur as small features in the cloughs and along the river valleys of the main moorland areas and can support very diverse plant assemblages. Many upland streams with rocky beds rise on moorland edge, some with rich moss and lichen communities. These streams broaden as they reach the lower slopes and are associated with streamline alder. In places large reservoirs have been established that can often be associated with marshes around inlet streams associated with various rushes, tufted hair-grass, marsh bedstraw and water mint.

## Human influences

Archaeological evidence suggests occupation of the area from prehistoric times. There is evidence of Neolithic settlement from excavations at Lismore Fields near Buxton. A few Bronze Age barrows survive on hill tops and other high ground, usually above the range of prehistoric cultivation.

Today, settlement is dispersed throughout the landscape and this is undoubtedly an ancient pattern established in medieval times or perhaps earlier. However, it is often difficult to date individual farmsteads and their fields. It would not be surprising if there are an equal number of farmsteads newly established as populations grew in post-medieval times, both near the older ones and on less advantageous ground. Irrespective of date, the farmsteads are usually surrounded by irregular and sub-rectangular fields which have been created and modified over the generations by individual farmers rather than having been planned communally or by large estates. Farmsteads and smallholdings that have a clear relationship to common land are significant. There is an exceptionally high survival of historic farmsteads in this area.

Although medieval farmsteads would originally have been cruck-framed buildings, these were normally rebuilt during the 17th to 19th centuries, usually using local gritstone and stone tiled or thatched roofs. Staffordshire blue clay tiles are an important roofing material in the more lowland landscapes to the west. The rebuilding in stone often makes it difficult to establish which farmsteads have medieval origins given the frequent absence of historical documentation.

In the northern half of the South West Peak, settlement may well have been inhibited until later medieval times, because of the existence of three medieval hunting forests: Macclesfield Forest in Cheshire, Malbanc Frith in Staffordshire, and part of the Royal Forest of the Peak in Derbyshire. Nucleated villages are not common, with only the old market village of Longnor and the small settlement of Sheen to the north and a series of four larger villages further south at the edge of the limestone plateau. All but Sheen

have field walls that define once open strips within medieval open fields but each of these village areas also has outlying farmsteads of a variety of dates.

Throughout the majority of the South West Peak fields tend to be small to medium in size and irregular to sub-rectangular in shape, reflecting piecemeal development over time by individual farmers rather than planning by village communities and large estates. Piecemeal enclosure presumably began in medieval times and continued to encroach onto the former open moorlands in particular in the 18th century and sometimes the 19th century.

Roads and tracks cross the landscape and in places rise to cross the high upland core. Some tracks link upland grazing to lowland settlements, while others are former transport routes. Some old disused tracks can be seen as braided hollow-ways cutting across slopes. In places 18th century roads follow almost direct routes, while elsewhere such roads were abandoned and more sinuous replacements were built in the early 19th century to avoid steep gradients which wagons could not negotiate in winter.

Large tracts of the South West Peak were owned by major estates, notably the Harpur-Crewe family, the Earls of Derby and the Dukes of Devonshire. Much of the Harpur-Crewe Estate passed into the ownership of the Peak District National Park Authority in the early 1980s. There is a large military training area on the sloping moorland to the south east of the Roaches.

Coal mining took place in this area from the medieval period to the early 20th century and there are extensive 17th to 19th century remains in the northern half of the South West Peak. The coal seams were thin and of poor quality, and while extensively worked for local industrial and domestic markets, the mines tended to be relatively shallow and accessed by a multitude of small shafts, with less common adits and short drainage levels. It was not normally economic to install expensive infrastructure to remove significant amounts of water to enable mining at greater depth. One exception was the Duke of Devonshire's mines south-west of Buxton, at Goyt's Moss and Thatch Marsh, which were accessed by both deep shafts with steam engines, and long drainage and haulage tunnels driven from Burbage; these provided coal for the lucrative lime burning industry at nearby Grin Hill. Occasional quarries for building stone and roofing slates can also be found through the area, often in remote moorland locations. These industries shaped the patterns of settlement: the additional livelihoods from mining and quarrying allowed much denser settlement of agriculturally poor land, particularly in the area around Flash. Copper was worked in this region. Water power was harnessed on the Goyt and Etherow rivers to power cotton mills.

The current agricultural economy of the area is based upon stock rearing of sheep and cattle, with dairying more common on the lower land. Traditionally the moorlands were used by communities for summer grazing, with peat, heather and bracken cut for fuel. Substantial amounts of moorland were enclosed in the 18th and 19th centuries, particularly in the south of the area. On the high upland plateau today there are extensive areas of rough grazing with some areas managed for grouse shooting. Where the moorland has been enclosed there is a complex mosaic of rough grazing and improved permanent pasture. The enclosed farmland on the lower hills is predominantly permanent grassland which varies in intensity of use from long term leys to unimproved rough grazing. The complex pattern of different agricultural management regimes is a key aspect of the South West Peak landscape.

## Sense of place

The South West Peak is a diverse landscape with a high, moorland core which is flanked by sloping landscapes, dissected by cloughs that broaden into more lowland pastoral landscapes. The strong contrast between the upland and lowland landscapes creates a distinctive sense of place. The high moorland landscapes are dominated by wild exposed blanket bog and dry heath which has, in places, been enclosed by gritstone walls, often into large parcels. There are distant views from the hills, both into the Peak District and over the adjoining lowlands to the west and a strong sense of wildness, remoteness and tranquillity.

Lower slopes and valleys are more settled with dispersed gritstone farmsteads, occasional small villages and smaller fields enclosed by gritstone walls and some hedgerows. There is a strong pastoral character in the lowlands to the west, the scattered trees along watercourses and boundaries create a sense of enclosure that is rare in the Peak District.

Eight distinct landscape character types have been identified in the South West Peak. They have been defined by their broadly repeating patterns of natural elements and cultural factors:

- **Open moors**
- **Moorland hills & ridges**
- **Enclosed gritstone upland**
- **Densely enclosed gritstone upland**
- **Slopes & valleys with woodland**
- **Upland pastures**
- **Upper valley pastures**
- **Reservoir valleys with woodland**
- **Riverside meadows**

## Open moors LCT

An open, rolling moorland landscape associated with high gritstone hill summits and broad upland basins. This is a wild, unsettled landscape with extensive areas of blanket bog and patches of dry heath. There are wide views across these moorlands and to surrounding hills. The moorland is crossed by historic transport routes.

This landscape character type occurs in extensive tracts on the highest hill summits and broad upland basins of the South West Peak, including Axe Edge Moor, Shining Tor, Combs Moss and Swallow Moss.

### Key characteristics

- Rolling hill summits extending to rounded ridges with wide views to distant hilltops
- Extensive deposits of blanket bog and some thinner peaty mineral soils
- Unenclosed heather moorland extensively grazed by sheep
- Historic transport routes, including packhorse tracks and turnpike roads

### Geology, landform and soils

This is a landscape of high undulating moorland summits. The high ground is underlain by the massive beds of hard Millstone Grit, which is more resistant to weathering than the shales that form the surrounding lower ground.

Blanket bog covers much of this landscape type with peat lying as a mantle over the gently sloping land. The peat is at least half a metre deep and can be up to 2 metres deep in places.

### Species and habitats

This landscape is dominated by wild, unenclosed heath and blanket mire. Dwarf shrub heath dominated by heather and bilberry, together with cottongrass blanket mire, provide habitat for the curlew and many other upland birds. On lower ground the peat is thinner and the peaty mineral soils result in dry heath vegetation.

Parts of the moorland are managed for shooting through a combination of regular burning and low level grazing which leads to a dominance of heather.

## **Tree cover**

Due to historic and continuing management practices this is mostly an open landscape with limited areas of tree cover. There are some patches of scrub regenerating on the open moorland which tends to be dominated by birch, grey willow and some rowan.

## **Land use**

This is a rough grazing landscape that supports extensive stock rearing. There are some enclosed pastures on lower land, many reverting to moorland but there are also areas of improved land in enclosures near to farmsteads. Moorland management for shooting is also practiced in parts of the area. Extensive relics of past coal mining and some sandstone quarrying exist on Combs Moss, Goyt's Moss and west of Axe Edge. The coal mining bell pits on Goyt's Moss have 17th-century origins and are of national importance; they helped to sustain the expansion of industry in Buxton.

## **Enclosure**

This landscape is characterised by extensive areas of unenclosed moorland with only occasional gritstone drystone walls defining ownership boundaries. There are occasional areas of enclosed land that encroach onto the moorland from adjacent landscapes, including Parliamentary Enclosure and older enclosure.

## **Settlement, buildings and monuments**

A handful of prehistoric monuments occupy highpoints in this moorland landscape with commanding views over the surrounding landscape. This includes the Iron Age hillfort of Castle Naze on a rocky spur of Combs Edge. Today this is a largely unsettled landscape, except for occasional isolated roadside dwellings or inns. These are robust buildings constructed of local gritstone with stone slate roofs.

## **Transport, access and recreation**

Although a very remote and largely unsettled landscape there are several major roads crossing the landscape. In places 18th century turnpike roads follow almost direct routes, while elsewhere such roads were abandoned and more sinuous replacements were built in the early 19th century to avoid steep gradients which wagons could not negotiate in winter. There are also remains of many older historic tracks and braided hollow-ways across the moorland marking former transport routes.

## **Moorland hills & ridges LCT**

This is a landscape of steep hill slopes and high ridges with heathland vegetation and prominent outcrops of steeply dipping gritstone. This wild, sparsely settled landscape has panoramic views to surrounding hills and over the lowlands to the west. Drystone walls define large enclosures.

**This landscape character type occurs on high hills and slopes along the central spine of the South West Peak. It includes distinctive hill and ridge summits, the steep slopes of the Roaches, Ramshaw Rocks, Shuttlingsloe, Morridge and the steep slopes above the Goyt Valley.**

## **Key characteristics**

- Steep hills, slopes and ridges with narrow summits and prominent outcrops of steeply dipping gritstone
- Rough grassland and dry heath extensively grazed by sheep Panoramic views to surrounding hills and over the lowlands to the west
- Occasional historic stone quarries, coal mining remains and military training areas

## **Geology, landform and soils**

Steeply dipping beds of Millstone Grit create steep slopes and ridges with prominent rocky exposures. These outcrops are most noticeable at the Roaches and Ramshaw Rocks where they form dramatic

features against the skyline. This landscape type includes the steep slopes that rise up to the open moorland summits.

This landscape is characterised by poor peaty soils. In places the soils are sandy and free draining.

### **Species and habitats**

The dominant vegetation is dwarf shrub heath with heather and bilberry. Elsewhere there are poorly drained areas, some of which have thicker deposits of peat and there are some areas characterised by cottongrass blanket mire.

### **Tree cover**

Due to historic and continuing grazing pressures there is generally limited tree cover in this exposed landscape, but there are extensive conifer plantations on the western side of the Goyt valley. Thorn bushes mark the course of some former hedgerows and there are occasional patches of willow scrub.

### **Land use**

This is a pastoral farming landscape with patches of rough grazing on heathland. Stock rearing of sheep and cattle predominates. Areas of smaller fields often have improved permanent grassland although some fields are reverting to heathland habitats. There is a large military training area on the sloping moorland to the south east of the Roaches that has controlled access. There are several sites of historic stone and roof slate quarries, while important examples of former coal mines are restricted to the upper Dane Valley, parts of the Goyt Valley and Burbage. There are popular climbing routes on the steep rocky outcrops at the Roaches, Hen Cloud and Ramshaw Rocks.

### **Enclosure**

This landscape was once largely unenclosed moorland but has since been divided by large enclosures bounded by gritstone walls. This is thought to have mostly occurred during the 18th and 19th centuries. As well as the large areas of moorland divided into large parcels, there are areas of smaller fields, some relatively old and others created after Parliamentary Enclosure. Many surviving walls define ownership boundaries and internal walls are often ruinous.

### **Settlement, buildings and monuments**

This is a sparsely settled landscape with only occasional isolated farmsteads set into the hill slopes for shelter. Farmsteads are constructed from local gritstone and are roofed with stone slates or Staffordshire blue clay tiles. Presumably most if not all were constructed in the 18th and 19th centuries when the landscape was enclosed. There are frequent sites of lost sheepfolds and outfarms.

### **Transport, access and recreation**

The few roads that cross this landscape often follow historic routes and run at an angle to the slopes, to give a gentler incline. These include roads first built as 18th and 19th century turnpike roads, again with re-routing to avoid earlier un-passable gradients. Some of the initial turnpike roads follow earlier hollow-way routes. There are patches of open access land associated with the areas of heathland.

### **Enclosed gritstone upland LCT**

An open landscape associated with broad, rolling hill summits. This is a landscape of isolated stone farmsteads, straight roads, regular fields of variable sizes enclosed by drystone walls and patches of remnant dry heath.

**This landscape character type occurs on the lower hill summits across the South West Peak around the fringes of the highest upland core, including Sponds Hill, Gun Hill, Butter ton Moor and the southern part of Morridge.**

## **Key characteristics**

- High rolling hill summits
- Permanent pasture with regular patterns of different sized fields enclosed by gritstone walls
- Remnant patches of rough land with bracken and gorse and some heather
- Straight roads with wide grass verges
- Isolated gritstone farmsteads with stone slate roofs

## **Geology, landform and soils**

This is a landscape of relatively high rolling hill summits which in places form rounded ridge summits. The high ground is underlain by the hard Millstone Grit, which is more resistant to weathering than the shales that form the surrounding lower ground. The beds of the gritstone are generally inclined and where they dip more steeply, the hill summits are narrower.

This landscape is characterised by poor, peaty soils. In places the soils are sandy and free draining, while elsewhere there are poorly draining areas, some of which have thicker deposits of peat.

## **Species and habitats**

There are signs of the moorland origins of this landscape in the remnant vegetation. There are occasional patches of heathland with heather, bilberry, gorse and bracken and remnants of heathland vegetation in the roadside verges. There are areas of acid grassland, the most diverse of which are dominated by sheep's fescue and common bent usually with a mixture of other species. Other areas of grassland are dominated by wavy hair-grass and are often associated with patches of heather and bilberry.

## **Tree cover**

Due to historic and continuing grazing pressure there is little tree cover in this landscape. Trees are mostly limited to tree groups of mature ash and sycamore that shelter farmsteads. There are occasional small blocks of post-war plantation woodland.

## **Land use**

This is a pastoral farming landscape which supports stock rearing and some dairying. There are some areas of rough grazing associated with the areas of dry heath. Important coal mining remains are found on Bakestonedale Moor and Sponds Moor to the north east of Bollington. Lead rakes and bell pits are found near Grindon and Thorncliffe, to the southwest of the area. The parkland at Lyme Park is an important designed landscape which includes significant areas of moorland. It has its origins as a medieval deer park which was landscaped in the 17th and 18th centuries, and later designed parkland and pleasure grounds associated with the hall. The contrast between the grounds around the Hall and the high and wilder parkland beyond, is of great significance.

## **Enclosure**

Much of this landscape was once open moorland but was enclosed, probably mostly during the 18th and 19th centuries. Drystone walls and occasional hedgerows define regular patterns of fields, some of which resulted from Parliamentary Enclosure and others which were enclosed privately. There are also areas of piecemeal enclosure of the moorland from various dates which tend to be more irregular. In parts the enclosures are large and regular and there are also smaller enclosures with a mixture of regular and irregular shapes, such as those around Hollinsclough and on Butter ton Moor.

## **Settlement, buildings and monuments**

There are a number of barrows on the higher ground and ridges and flint artefacts in soils (for example around Leekfrith) attest to prehistoric activity in the area. Several Anglo-Saxon crosses (and fragments) mark important routes on the western edge of the area. This is a sparsely settled landscape with only occasional isolated farmsteads. Farmsteads are constructed from local gritstone and are roofed

with stone slate or Staffordshire blue clay tiles. Most farmsteads were presumably constructed during the 18th and 19th centuries when the landscape was enclosed.

### Transport, access and recreation

The landscape is crossed by direct roads, with uniform verges often containing remnants of heathland vegetation. In areas of Parliamentary Enclosure, roads are often very straight. The road network is supplemented by a network of footpaths that link isolated farmsteads. There are some areas of access land associated with heathland.

## Densely enclosed gritstone upland LCT

An undulating upland landscape with occasional rocky summits. There are a significant number of dispersed small gritstone farmsteads and cottages in this remote landscape, some associated with the former coal mining industry. This is a landscape of rough permanent pasture enclosed by gritstone walls. There are patches of heather moorland and areas of pasture reverting to moorland.

This landscape character type occurs in one discrete area in the area around Flash and Goldsitch Moss.

### Key characteristics

- Undulating upland landscape with occasional rocky summits
- Permanent pasture enclosed by gritstone walls with patches of heather moorland and areas of pasture reverting to moorland
- Open views over surrounding landscape and to adjacent hills
- Dispersed settlement of small gritstone farmsteads and cottages, some associated with former coal mining industry

### Geology, landform and soils

This is a landscape of high rolling hill summits which, in places, rise to rocky moorland summits. The highest ground is underlain by the hard Millstone Grit. The beds of rock are folded with the younger rocks of the Coal Measures outcropping in the area around Goldsitch Moss. These interbedded gritstones, siltstones and shales have seams of coal.

This landscape is characterised by poor peaty soils. In places the soils are sandy and free draining, while elsewhere there are poorly draining areas, some of which have thicker deposits of peat.

### Species and habitats

There are signs of the moorland origins of this landscape in the remnant vegetation. There are extensive patches of heathland with heather, bilberry, gorse and bracken. Remnants of heathland vegetation are also found in the roadside verges. There are areas of acid grassland, the most diverse of which are dominated by sheep's fescue and common bent usually with a mixture of other species. Other areas of grassland are dominated by wavy hair-grass and are often associated with patches of heather and bilberry.

### Tree cover

Due to historic and continuing grazing pressure there is little tree cover in this landscape. Trees are limited to occasional trees grouped around farmsteads. There are occasional small blocks of 20th century coniferous plantation woodland.

### Land use

This is a pastoral farming landscape which supports stock rearing. There are some areas of rough grazing associated with heathland. There are extensive relict coal mines in a band from Orchard Farm southwards to Blue Hills, with a particularly important concentration at Goldsitch Moss.

## **Enclosure**

This landscape was enclosed from open moorland. Map evidence shows that it was mostly already enclosed by the mid 19th century at the latest. The enclosure is likely to be of a variety of dates, mostly in post-medieval times, but some earlier. The enclosure was mainly piecemeal or by private agreement so the field pattern is generally irregular. Gritstone walls define the field boundaries. The enclosure has strong contrasts between small enclosures around farmsteads and cottages, interspersed with larger areas of enclosed moorland and rough grazing.

## **Settlement, buildings and monuments**

Considering the remoteness of this landscape and poor soils, this is a remarkably settled landscape with frequent dispersed small farmsteads and cottages. Buildings are constructed from local gritstone and are roofed with stone slate or Staffordshire blue clay tiles. The most likely explanation for the high density of dwellings in such a remote landscape is that a significant proportion were built to provide housing for people working in the local coal industry, which included small-scale local operations and the somewhat larger scale mines at Danebower, Orchard Common and Goldsitch Moss. The additional income associated with the mining allowed the land to support a larger population than would otherwise be possible. This industry started in the medieval period, was locally at its height in the 18th century and continued into the early 20th century.

## **Transport, access and recreation**

The landscape has a dense network of roads linking the dispersed settlements. Roads tend to be sinuous because the road network was influenced by the topography and the locations of enclosure, dwellings and mines; the key exception is a section of the A53 to the south that follows the course of a Roman Road between Buxton and Penkridge. There is a dense network of footpaths that links the dispersed settlements and there are areas of access land associated with heathland.

## **Slopes & valleys with woodland LCT**

This is a pastoral landscape with a varied undulating topography of steep slopes, low ridges and incised valleys. Blocks of woodland are a characteristic feature of this landscape, together with patches of acid grassland and bracken on steeper slopes and higher ground. This is an area of traditional dispersed settlement with probable ancient origins. Views to lower ground are framed by woodlands and valley sides.

**This landscape covers extensive tracts of the western slopes of the South West Peak, in the landscapes rising above Macclesfield and Leek.**

## **Key characteristics**

- Undulating topography with incised valleys and rounded summits
- Patches of acid grassland on steeper slopes
- Irregular blocks of ancient woodland along cloughs and valley sides
- Permanent pasture in small to medium sized fields enclosed by hedgerows and trees
- Narrow winding, often sunken lanes
- Scattered farms and loose clusters of dwellings

## **Geology, landform and soils**

This is an undulating landscape with steeply sloping land underlain by gritstone and incised cloughs which cut into the softer shales below. The undulating landform is shaped by the dipping beds of the Millstone Grit. The lower ground is underlain by shale with some limestone interbedded and there are also some outcrops of Coal Measures.

This landscape is characterised by heavy soils which can be poorly draining. On steeper slopes there are more freely draining, acid soils.

### **Species and habitats**

The oak woodland on the slopes has both sessile and pedunculate oak, mixed with downy and silver birch, holly, rowan and hazel. The acid soil supports bracken, wavy hair-grass and locally bilberry as well as an abundance of ferns. There are patches of alder dominated wet woodland along streams and in wet hollows. On flushed slopes the wet ground often has a layer of mosses, sedges, horsetails and ferns. There is unimproved grassland which can provide for a range of herbs; in places the grassland is wet, containing soft rush. There are relic patches of dry heath which support heather, bilberry and gorse with some bracken on the steeper slopes.

### **Tree cover**

This landscape has a strongly wooded character which creates filtered views through the landscape. There are woodland blocks along cloughs and slopes, which combine with scattered trees along field boundaries and watercourses and with tree groups around settlements. A lot of the woodlands have presumably existed for many hundreds of years and may have been managed by coppicing to provide wood and charcoal. Woodland blocks, belts and specimens are a notable feature of parkland landscapes such as at Lyme Park. There are large 20th century plantation woodlands, including extensive areas of coniferous woodland at Macclesfield Forest.

### **Land use**

Part of this landscape type falls within the medieval Royal Forest of Macclesfield which still has an influence on the modern landscape. This is a pastoral landscape dominated by stock rearing for sheep and cattle. Due to the often steep topography, the land is difficult to reseed so is usually managed as permanent pasture. On higher ground and on the steepest slopes there are areas of rough grazing. There is ornamental parkland in this landscape at Lyme Park and Swythamley Hall. Important and extensive coal mining and quarrying found at Kerridge to the south east of Bollington. Traces of late 19th and early 20th-century quarrying is found at Tegg's Nose and Bllinge. Some valleys contain evidence for past water-powered industries, for example along the River Dane.

### **Enclosure**

There is limited map evidence showing that parts of this landscape were enclosed in the 17th century. Enclosure was probably relatively common by this date but for most places early maps do not exist to provide evidence of this. Evidence of tithe maps and Parliamentary Enclosure Award maps show that much of the landscape was already enclosed by the mid 19th century, with many of these areas taken in from open common in the 17th to earlier 19th centuries. While remaining areas of common were enclosed during the 19th century. Fields are generally enclosed by drystone walls, with some mixed hedgerows containing holly and hazel. Hedgerows are more common on lower slopes.

### **Settlement, buildings and monuments**

Occasional barrows occupy higher ground around Bollington and Kettleshulme and a possible hillfort lies to the east of Rainow low. A scheduled deer pound on the summit of Toot Hill relates to the former Royal Forest. Settlement is very dispersed in this landscape consisting of farmsteads and occasional large houses. In places there are loose clusters of farms and cottages, sometimes more nucleated around a road junction. While some of these places have origins in the medieval period if not earlier, today's buildings mostly date from between the 17th to 19th centuries, are generally constructed of local gritstone and roofed with stone slates or Staffordshire blue clay tiles.

### **Transport, access and recreation**

This is a generally peaceful landscape with small winding lanes which are often sunken on slopes. The lanes are supplemented by a network of footpaths that link dispersed farmsteads.

## Upland pastures LCT

This is an upland pastoral landscape with a traditional dispersed pattern of gritstone farmsteads of probable ancient origins. There are also localised village settlements. Permanent pasture is enclosed by drystone walls and some hedgerows. Trees are scattered along incised cloughs and around dispersed gritstone farmsteads. This is a very peaceful rural landscape with open views to surrounding higher ground.

This landscape character type occurs on the higher ground towards the southern part of the South West Peak, around Mixon, Warslow, Butterton, Longnor, Hollinsclough and Grindon.

### Key characteristics

- Undulating slopes with gentler summits and incised cloughs Dispersed gritstone farmsteads and loose clusters of dwellings, with stone slates or clay tile roofs
- Permanent pasture enclosed by gritstone walls and some thorn hedgerows
- Scattered trees along cloughs and around farmsteads
- Fields of rushy pasture and occasional patches of bracken, bilberry and heather
- Narrow winding lanes which are sunken on slopes
- Various shaped small to medium fields of various dates
- Bronze Age barrows on hills and ridges

### Geology, landform and soils

This undulating upland landscape is underlain by a complex mix of interbedded gritstones and shales. There are also areas where thin limestone beds are interbedded with the gritstones and shales. The higher land is defined by thicker beds of gritstone, while the valleys cut through into the softer shale-dominated rocks.

The soils in this landscape are heavy and prone to seasonal waterlogging.

### Species and habitats

In places soils are particularly impoverished or peaty which gives rise to remnant patches of wet heath and /or bog. Occasional species-rich pastures and meadows occur. The surviving hay meadows have a range of grasses mixed with oxeye daisy, knapweed, self-heal and ribwort plantain. Wet or marshy grasslands are often characterised by the grass, Yorkshire fog and have patches of soft rush. There are also occasional fields of acid grassland and localised patches of bracken. Heather and bilberry are found in patches of rough land, particularly in road verges.

### Tree cover

Due to historic and continuing grazing pressures tree cover is fairly limited in this landscape. Trees are grouped around settlements for shelter. There are also scattered trees along some field boundaries and watercourses which filter views in places.

### Land use

This is a pastoral farming landscape with stock rearing of sheep and cattle and some dairying. Many fields have been highly improved and are cut for silage. Some fields are still cut for hay while other poorer quality pasture has patches of rushes. Parts of the High Priority Lead Mining Landscape of Ecton Mine reaches into this landscape type at Dale Mine in the Manifold Valley.

### Enclosure

This is an enclosed landscape with irregular and sub-rectangular shaped fields enclosed by gritstone walls and some hedgerows. Map evidence shows that much of the landscape was already enclosed by the mid 19th century at latest and it is likely that a significant proportion of the enclosures are considerably older

than this. However, there are no early maps to demonstrate this. In the areas less favourable for farming, which were often poorly drained, it is possible that many similar enclosures continued to be created by individual farmers well into post-medieval times as population and farming expanded into former open and wooded areas. Much of the northern half of the Upland Pastures area, on the ridges flanking the upper valleys of the Dove and Manifold, was part of the forest of Malbanc Frith and forest laws may have inhibited settlement until later medieval times. Today, there are also a few areas of narrow strip fields, always near the villages, for example near Longnor and Butterton. These preserve the pattern of medieval open field farming.

### **Settlement, buildings and monuments**

There are numerous Bronze Age barrows on hilltop and hillside locations, with concentrations north of Hulme End, and south of Grindon. This is a settled landscape with dispersed farmsteads, sometimes in loose clusters, and a few villages. Three of the villages flank the limestone plateau and are an extension of the nucleated settlement pattern here. Further north, Longnor is probably a medieval imposition on the dispersed settlement landscape, created to provide a local market place and service centre for the farming community.

Sheen is very small today and is perhaps little different from the hamlet clusters found throughout much of the South West Peak. Settlement on these uplands is often associated with springs. While some places have medieval or earlier origins, today's buildings mostly date from between the 17th to 19th centuries and are constructed of local gritstone with clay tile roofs. There is also some limestone used for the construction of buildings in the areas adjacent to White Peak landscapes.

### **Transport, access and recreation**

This landscape is crossed by narrow sinuous lanes with narrow verges. The lanes are enclosed by drystone walls with occasional hedgerows. Farmsteads are often set back from main through routes on tracks. Roads and tracks can be sunken where they have cut into sloping land. There is a dense network of public footpaths, providing routes through the landscape and linking farmsteads.

### **Upper valley pastures LCT**

This is a settled pastoral valley landscape with scattered trees along hedgerows, around settlements and following streams. Fields of permanent pasture are divided by hedgerows and occasional drystone walls. This is a settled landscape with dispersed gritstone farmsteads with stone or clay tile roofs. Views along the valley and to surrounding hills are filtered through scattered trees.

**This landscape is found as discrete valley units in the foothills of the South West Peak. It includes the upper valleys of the River Dove and Manifold, and valleys near Kettleshulme and Combs.**

### **Key characteristics**

- Undulating lower valley slopes with incised stream valleys
- Scattered trees along hedgerows, around settlements and alders along incised streams
- A settled landscape with dispersed gritstone farmsteads and loose clusters of dwellings with stone slate or clay tile roofs
- Permanent pasture enclosed by a mixture of drystone walls and hedgerows and patches of rushy pasture
- Narrow winding lanes

### **Geology, landform and soils**

This is a low lying landscape of valley slopes that is framed by surrounding higher ground. The landscape is underlain by soft shale rocks and occasional pockets of sands and gravels. Incised stream valleys create local variation in the landform and in places are fringed by deposits of alluvium.

The soils in this landscape are heavy and prone to seasonal waterlogging.

### **Species and habitats**

There is only limited semi-natural habitat in this farmed landscape. The surviving hay meadows have a range of grasses mixed with oxeye daisy, knapweed, self-heal and ribwort plantain. Wet or marshy grasslands are often characterised by the grass, Yorkshire fog and have patches of soft rush. Alder is found fringing the watercourses, sometimes forming denser wooded belts.

### **Tree cover**

Although there is limited woodland in this landscape, there is often a well-wooded feel due to the many scattered trees along field boundaries, watercourses and around settlement.

### **Land use**

This is a pastoral farming landscape with stock rearing of sheep and cattle and some dairying. Many fields have been highly improved and are cut for silage. There are damp hollows in some fields which have patches of rushes. To the southeast of Hollinsclough and also north of Winkhill are the well-preserved remains of post-medieval water meadows. A group of fields around Beresford Hall may be the remains of a designed parkland.

### **Enclosure**

This is an enclosed landscape with irregular shaped fields enclosed by a mixture of hedgerows and gritstone walls. Hedgerows are mostly dominated by hawthorn and blackthorn but some are more mixed and include holly and hazel. Map evidence shows that much of the landscape was already enclosed by the mid 19th century at latest and it is likely that a significant proportion of the enclosures are considerably older than this. However, there are no early maps to demonstrate this. In the areas less favourable for farming, which were often poorly drained, it would not be surprising if many similar enclosures continued to be created by individual farmers well into post-medieval times as population as farming expanded into former open and wooded areas.

### **Settlement, buildings and monuments**

The motte and bailey castle at Pilsbury holds a commanding valleyside location in the Dove Valley, and other fortified or moated sites further downstream towards Hartington indicate the importance of this valley as a through route and territorial boundary. Settlement is dispersed through the landscape with farmsteads built of local gritstone and often with stone slate roofs. There are also small clusters of farms and cottages, often found at crossing points of the many streams and rivers. Although some places have medieval if not earlier origins, the present buildings date from the 17th to 19th century. Some limestone is found in buildings and walls near to the adjacent White Peak landscapes. Those parts of the valleys of the Dove and Manifold in this character type were part of the forest of Malbanc Frith and forest laws may have inhibited settlement until later medieval times.

### **Transport, access and recreation**

This landscape is crossed by narrow sinuous lanes with narrow verges. The lanes are enclosed by hedgerows or drystone walls. There are public footpaths running along the valleys and connecting outlying farmsteads. The Waterhouses branch of the North Staffordshire Railway runs through the southern part of this landscape.

## **Reservoir valleys with woodland LCT**

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

This landscape character type occurs in the Goyt Valley.

## Key characteristics

- Interlocking coniferous and mixed plantation woodland with some limited semi-natural woodland
- Large reservoirs providing water supplies to adjoining urban areas
- Steep valley slopes, dissected by cloughs
- Land was largely cleared of settlement during reservoir construction leaving occasional isolated gritstone farmsteads
- Pastoral fields bounded by gritstone walls with many relict boundaries

## Geology, landform and soils

This is a landscape with a prominent, sloping topography cutting into the gritstone moorland. The underlying geology is mainly hard interbedded gritstones with, in places, softer shales which give rise to a fairly unified, steeply sloping landform with narrow valley bottoms. In places the slopes are dissected by deep cloughs. Coal Measures also outcrop in the Goyt Valley including interbedded mudstones, shales and sandstones and some coals seams.

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

## Soils and vegetation

Owing to the poor quality of the soils, this was a landscape with widespread patches of semi-natural vegetation, much of which has now been planted with conifer woodlands. In places patches of ancient semi-natural woodland exist, supporting a range of ground flora species including bilberry and dog's mercury. There is bracken associated with acid grassland on the sloping land in these landscapes.

## Tree cover

This landscape is extensively wooded, mostly recent conifer plantations of pine, spruce and larch, planted on land that was previously open heath, or grassland. Some of the plantations were planted on the site of ancient woodlands that were cleared of native trees. Patches of ancient semi-natural woodland are now linked by the areas of plantation woodland to create a heavily wooded landscape.

## Land use

Although there is some low intensity pastoral farming, water supply with forestry and recreation around the reservoirs are the dominant land uses in this landscape. The Goyt Valley was acquired by the Stockport Corporation Waterworks in the early 20th century to construct reservoirs for drinking water. Farmsteads and cottages were cleared and demolished to protect the water catchment area. Historically, coal mining was carried out in the Goyt Valley and remains include shaft mounds, gin circles and causeways between many of the shafts to allow access across wet ground. The extensive ruins of Errwood Hall lie to the southwest of the reservoir. Around it are the remnants of its former parkland and designed landscape, with a variety of woodland types, and a dramatic moorland backdrop.

## Enclosure

This is an enclosed landscape with irregular shaped fields enclosed mostly by gritstone walls. Map evidence shows that much of the landscape was already enclosed by the mid 19th century at latest and it is likely that a significant proportion of the enclosures are considerably older than this. The enclosure pattern was rationalised with the establishment of the reservoirs.

## **Settlement, buildings and monuments**

This is not a significantly settled landscape with just occasional isolated gritstone farmsteads. This landscape was formerly more densely settled but was deliberately de-populated in order to establish the reservoirs.

## **Transport, access and recreation**

Several historic routes and tracks lead out from the southern end of the valley, up and over the moorland. The route of the Cromford and High Peak Railway passes through the valley. The road pattern was affected by the establishment of the reservoirs and modern lanes tend to run alongside the reservoirs. There are popular recreational routes around the reservoirs and through the woodland plantations.

## **Riverside meadows LCT**

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

This landscape character type is very limited in extent, occurring only as narrow bands along the lower reaches of the River Goyt and the River Dane.

### **Key characteristics**

- A flat alluvial river corridor with a meandering river channel with shingle beds and marginal vegetation
- Seasonally waterlogged alluvial soils
- Grazing meadows, often with patches of wet grassland
- Dense waterside and scattered hedgerow trees

## **Geology, landform and soils**

This is a low lying valley floor landscape with localised hummocks and hollows. Incised, meandering streams with a rocky bed flow through the landscape. Beside the river channel the floodplain is underlain by alluvial mud lying over gravels. There are hollows in the floodplain reflecting the past course of the river.

The floodplain is characterised by gleaved soils that are either continuously or seasonally waterlogged.

## **Species and habitats**

The waterlogged floodplain gives rise to wet pastures which support soft rush, Yorkshire fog grass and some sedges. This is a well wooded landscape with dense streamside trees and small patches of wet woodland which are dominated by alder with some willow.

## **Tree cover**

River banks are densely lined with alder, together with some oak and sycamore. This creates an intimate, well-treed landscape where views are filtered by watercourse trees and framed by the adjacent wooded slopes.

## **Land use**

This is a pastoral landscape with improved permanent pasture dominating. There is some semi-improved grassland. There is evidence for historic use of water-power relating to a former colour works Danebridge.

### **Enclosure**

Thorn hedgerows and occasional gritstone walls run along the outer edge of the valley floor and divide the meadows beside the watercourses into irregular strips. Early maps show parts of the landscape were enclosed by the early 17th century while later maps show that much of the rest of the landscape was enclosed by the mid 19th century at latest.

### **Settlement, buildings and monuments**

This is an unsettled landscape because of the wet nature of the soils and the risk of flooding.

### **Transport, access and recreation**

Roads often run along the edge of the valley floor on higher ground and cross the meadows at historic crossing points such as at Danebridge.

# SECTION 3: GUIDING LANDSCAPE CHANGE IN THE PEAK DISTRICT

## 3.1 Landscape policy in the Local Plan.

Proposals for development, management strategies and enhancement opportunities (including Nature and Landscape Recovery schemes) should positively respond to distinctive landscape character. Development in particular should respond to Local Plan **Policy L1 – Landscape character and Valued Characteristics:**

- A. *Development must conserve and enhance valued landscape character, as identified in the Landscape Strategy and Action Plan, and other valued characteristics.*
- B. *Other than in exceptional circumstances, proposals for development in the Natural Zone will not be permitted.*

Valued and distinctive **landscape character** for the 8 LCAs (and their individual LCTs) within the Peak District is defined in **Section 2**. Landscape character and valued characteristics are also related to sites of biodiversity or geodiversity importance (**Policy L2**) and Cultural heritage assets of archaeological, architectural, artistic or historic significance (**Policy L3**).

## 3.2 Landscape aims and objectives

These are based on the Peak District Management Plan and the character and distinctiveness of our landscapes.

The 20 year vision for the Peak District National Park as detailed in the Management Plan is:

*'By 2043 the Peak District National Park is exemplary in its response to climate change and nature recovery. Its special qualities and resilience as a living landscape have been significantly enhanced. It is a welcoming place where all are inspired to care and communities thrive.'*

Key links from the **Management Plan** to the **Landscape Strategy aims and objectives** include:

### NPMP Aim One: Climate Change

The Peak District National Park is more resilient and net-zero by 2040 through its exemplary response to climate change.

**Objective 2:** To sequester and store substantially more carbon while contributing to nature recovery.

**Objective 3:** To reverse damage to nature, biodiversity, cultural heritage and the built environment caused by a changing climate.

### NPMP Aim Two: Landscape and Nature Recovery

The Peak District National Park is a resilient landscape in which nature, beauty, and cultural heritage are significantly enhanced.

**Objective 4:** To be a place where nature recovers and biodiversity flourishes.

**Objective 5:** To understand, appreciate and enhance the cultural heritage and built environment of the National Park as part of an ever-changing landscape.

**Objective 6:** To protect and enhance the natural beauty of the Peak District National Park's contrasting and ever-evolving landscape

### NPMP Aim Three: A Welcoming Place

The Peak District is a welcoming place where all are inspired to enjoy, care for and connect to its special qualities.

The Landscape Strategy adds further detail to these aims and objectives by [defining a series of landscape-specific outcomes and outputs](#).

### 3.3 Landscape Strategy outcomes and outputs

**Landscape outcomes and outputs** (which should inform and be key factors in plan making, project development, partnership working and decision-making) are detailed below.

**Landscape Guidelines** show whereabouts in the National Park landscape these outcomes and outputs are most important – some are relevant across the whole park, while others are more appropriate in certain areas.

**The promotion of climate mitigation and adaption measures underpin all the landscape outcomes and objectives.** As detailed in the Peak District National Park Climate Change Vulnerability Assessment (PDNPA, 2020), a wide range of landscape features, landscape types and special qualities have the potential to be significantly adversely impacted by climate change. We should look to encourage landscape resilience to the effects of climate change.

#### **Landscape Outcome 1: Enhancing our moorland landscapes to deliver greater biodiversity, carbon storage, flood storage and sense of ‘wildness’**

**The condition and extent of the peat resource** is vital to ensure carbon and water are sustainably stored in our moorlands, biodiversity is re-established and the sense of wildness retained and enhanced. Healthy peat also ensures that important palaeoenvironmental information is preserved.

Over 80% of the UK’s peatlands have been degraded due to human activity ([Space4Climate, Peatland Monitoring from Space, 2021](#)), vastly decreasing their capacity for carbon storage and with associated biodiversity loss. Peatlands in the Peak District are no different.

Well-managed peatlands have the potential to be massive carbon sinks: A near natural bog can remove 3.54 tonnes carbon dioxide per hectare per year (tCO<sub>2</sub> ha<sup>-1</sup>yr<sup>-1</sup>) ([Space4Climate, Peatland Monitoring from Space, 2021](#)) in addition to being water stores and rich in biodiversity.

The moorlands of the Peak District store massive amounts of carbon. However, while active blanket bog has the potential to sequester even more carbon, their poor condition means that in many cases existing carbon stores are being lost; biodiversity and palaeoenvironmental value is constrained or lost; and flood storage potential and water quality are reduced. There are also economic costs associated with poor moorland environmental condition, such as the cost of water treatment and flood damage.

Moorland landscapes in the Peak District are heavily degraded with many areas in a poor condition- 88% of SSSI land in the Dark Peak, which includes virtually all the moorland, has been assessed as in Unfavourable condition. This is partially as a result of historic atmospheric pollution and partly due to inappropriate historic – and ongoing – management practices. Overgrazing and inappropriate burning remain the two most significant factors, although recent legislation ([The Heather and Grass etc. Burning \(England\) Regulations 2021 \(legislation.gov.uk\)](#)) now bans burning on deep peat without a license on Special Protection Areas and Special Areas of Conservation. Regular burning and cutting patterns and the construction of infrastructure such as butts and tracks, while often have a negative impact on the qualities of wildness, remoteness and naturalness of the moors.

Our aim for the moors is that they should grow back wilder and more biodiverse, with the natural hydrological functioning of restored blanket bog and a mosaic of vegetation such as sphagnum, cottongrass, rush, heather, bilberry, cowberry, crowberry and gorse studded with scattered trees, scrub

and woodland encouraged – to create a more natural, diverse landscape which is more resistant to wildfires.

When in healthy condition peatlands sequester carbon slowly but are unique in that they can go on doing so indefinitely. Peatlands in England have long been subjected to damaging land use, resulting in them becoming a large source of greenhouse gas emissions, releasing carbon previously stored for millennia. **Restoration interventions** in many cases will reduce these emissions, allow biodiversity to recover, increase peatlands resilience in the face of a changing climate and provide a range of benefits for people and society. Restoring the carbon sink function of peatlands is possible though may take decades depending on the initial level of damage to a site. Restoration actions include blocking drains, stopping burning and removing conifer plantations. ([Carbon Storage and sequestration by habitat: a review of the evidence, Natural England, 2021](#)).

**Key Moorland management and restoration landscape outputs** include:

**1.1 Undertaking positive engagement and dialogue with moorland owners/managers, promotion of best practice and positive partnership working** with public landowners/managers and organisations (such as the Utility companies, National Trust, RSPB and Moors for the Future) to promote positive management.

Positive management aims includes a reduction in the intensity of management to encourage natural processes, improve the condition of both the peatland resource and SSSI and promote a diverse landscape mosaic of habitats. In addition to carbon sequestration, landscape enhancements offer multi-functional benefits to biodiversity, water management, heritage protection and recreation.

Positive management operations include: the cessation of burning on deep peat /blanket bog, restoration of bare peat, bracken control, gully blocking, sphagnum plug planting, implementation of sustainable grazing regimes, areas of stock enclosure (to enable natural regeneration and recolonization) and upland footpath restoration.

**1.2 Ensuring policy and decision-making protects the openness, wildness and tranquillity of the moorland landscape** with their limited enclosure while preserving the often subtle or unseen cultural elements of these landscapes.

This includes:

- limiting and controlling new fencelines, new tracks and track upgrades to ensure these are necessary (where prior proven need for land management has been demonstrated) and if so, effectively designed, sited / accommodated into the landscape to not conflict with character;
- Protecting viewpoints to ensure open sweeping vistas and views of dramatic geology are maintained.

**1.3 ‘Role modelling’ best practice** by implementing these measures on our own moorland estates, and use this to advocate positive change across the peatland landscape.

**Landscape Outcome 2: Supporting farmers and land managers to maximise the take-up and best use of future Environmental Land Management schemes (and other funding sources) to protect, manage and enhance the character and quality of the landscape, while supporting the farm economy**

While the exact shape of the future ELM schemes are not yet defined, it is likely that land managers will be eligible for agricultural subsidy that encourages a range of actions to provide a range of ‘*public goods*

*for public money*'. We would like to encourage and support farmers and land managers to take up ELM schemes, to support both farm economies and the enhance landscape character – the Peak District is a living, working farmed landscape.

**Key outputs to enhance the natural beauty of the farmed landscape** include:

- 2.1 conserving, restoring, enhancing, buffering, linking and expanding **existing wildlife habitats**, taking a landscape-scale view to ensure that individual agreements deliver environmental benefits for the wider landscape as well as individual holdings while maximising the delivery of 'public goods'.
- 2.2 encouraging and supporting **wildlife-friendly farming practices** that allow wildlife to co-exist with commercial farming, such as late cutting of silage fields/meadows to benefit nesting waders, grassland species diversity, low intensity field margins and the creation of areas of wood-pasture.
- 2.3 promoting and supporting **measures to reduce carbon emissions, sequester and store carbon** on agricultural land.
- 2.4 promoting and supporting measures to **improve soil quality and health and protect peat** from erosion, damaging drainage or inappropriate management practices.

In addition to the above:

- 2.5 supporting the **sympathetic conservation/restoration or adaptive re-use of traditional farm buildings** where appropriate, and where such use is consistent with and supports surrounding landscape value, character and context. Traditional farm buildings are important features in the landscape and it is important to retain their historic character, their relationship with the surrounding contextual landscape and to facilitate their continued use by species such as barn owls, swallows and bats.
- 2.6 supporting measures to help **farms adapt to a changing climate** and measures that promote biosecurity, energy and water efficiency (for example, agroforestry for diversification of the farm economy, shading of livestock and nutrient management)

### **Landscape Outcome 3: Promoting a more wooded landscape, where increased tree cover and woodland forms part of a wider landscape mosaic**

**Promote the creation and restoration of wooded landscape character within the Park through the 'Wooded Landscapes Plan'.**

The largest carbon sequestration rates amongst semi-natural habitats are in woodlands. Native broadleaved woodlands are reliable carbon sinks that continue to take up carbon over centuries with benefits for biodiversity and other ecosystem services, although the rate varies greatly with tree species and age and is strongly influenced by soils and climate.

Native woodland managed with a minimum intervention approach can be an effective climate change mitigation measure. Timber production can have benefits for climate change mitigation where wood products store carbon for the long-term, or replace more fossil fuel intensive materials and fuels; and can be produced in ways that support biodiversity, such as using native tree species and management of rides and forest edges. However, non-native species of tree generally support lower levels of biodiversity and plantations on peatlands have led both to the loss of biodiversity and carbon.

Hedgerows, orchards and other trees outside woodland can also sequester and store carbon as well as providing other benefits within an agricultural and biodiversity context ([Carbon Storage and sequestration by habitat: a review of the evidence, Natural England, 2021](#)).

The objective is for multi-functional tree cover to be part of an enhanced mosaic of landscape and habitat elements. This can include both strengthened – and in places different – landscape character.

This is outlined in detail in the ‘Wooded Landscapes Plan’ in [Section 4 Action Plans](#), with the key outputs outlined below.

**Key outputs to increase tree cover at a landscape scale** include:

- 3.1 In the moorlands, supporting the [extension and creation of new clough woodlands](#), rolling scattered trees/scrub over the tops of cloughs and areas of scattered scrub in appropriate locations (eroded gulleys, slipped areas of peat etc.)
- 3.2 Supporting the creation, expansion and connection of areas of [existing fragmented woodland](#) and the expansion of wooded landscape elements (including scattered trees and scrub) on the moorland fringes and valley sides in the uplands
- 3.3 Supporting the creation, expansion and connection of areas of [riparian woodland](#) on the lower valley sides and valley floors
- 3.4 Supporting the increase and connection of [wooded landscapes through the limestone plateau, on dale sides and along limestone hills and ridges](#). This includes the expansion of native daleside woodland and scrub over the dale brows onto the improved grasslands, expanding areas of wood-pasture and the protection and enhancement of linear / scattered trees.
- 3.5 Supporting resilient landscapes that can adapt to the [impacts of ash dieback](#) / other pests and diseases. We will work in partnership with landowners and other stakeholders to promote and support action on a landscape scale, gather data to understand current and future threats, prepare clear Ash dieback plans, encourage more diverse treescapes and natural regeneration of woodland species.
- 3.6 Protecting and promoting the management of [individual trees, groups of trees and linear trees](#) within/on the boundaries of settlements and farmsteads

**Key outputs to increase tree cover at a farm scale** include:

- 3.7 Supporting the protection, positive management and expansion of [wooded landscape elements in the largely pastoral farmed landscapes](#). These include field boundary trees, hedgerows (new hedges, plus buffering, gapping up and planting hedgerow trees in existing hedges), appropriately designed areas of agroforestry, shelterbelts, areas of scrub, riparian buffers, small productive woodlands and wood-pasture.

#### **Landscape Outcome 4: Protecting, maintaining and enhancing the historic built environment and characteristic historic pattern of settlement and enclosure**

Agricultural practice over the last few hundred years has shaped our landscapes. The type and shape of field enclosure is a fundamental part of almost all our Landscape Character Areas. Enclosure boundaries help us to understand how landscapes and agricultural practices have developed over time from piecemeal enclosure, through the fossilisation of communally worked medieval strip fields to the imposition of a more regimented and apportioned Parliamentary Enclosure. Even areas of relict boundaries, such as those areas of enclosed moorland that were ‘cleared’ to provide catchments for reservoirs, provide important information on historic land use and management.

The relationship of field patterns and historic routes to settlements can help us understand how settlements developed; fields surrounding settlements usually provide the setting to, or are included

within, designated conservation areas. Walled landscapes provide some of our most iconic views, and an instant visual connection to the underlying geology, creating a strong sense of place.

Local vernacular and building traditions are crucial to the overall character of places. Sometimes these are hidden from view (for example, cruck timber framing). The use of traditional techniques and materials not only maintains the character of the historic built environment, providing important links to former industries or agricultural practices, but also maintains an important skills base for sustainable development into the future.

**Key landscape outputs for the historic built environment and settlement/enclosure patterns** include:

**4.1 Protecting and enhancing the historic character, pattern and landscape setting of settlement and farmsteads set within the wider pastoral landscape**, including designed settlements such as Ilam and Edensor, their historic houses and the social, economic and environmental developments they represent and contribute to. New development and adaptive re-use should respond positively to the historical settlement patterns and form, density, local materials and building traditions. Attention needs to be paid to understanding and revealing the relationship between settlement, former industries, and other historic land management (e.g. medieval granges). Good site selection, positive design and effective mitigation for new agricultural buildings is vital to protect landscape character.

**4.2 Securing the integrity of historic drystone walls, wall features, hedgerows and the historic patterns of enclosure.** The integrity and character of historic enclosure should be maintained. Find opportunities to restore historic boundaries and deter the piecemeal loss of boundaries, maintaining stratigraphic relationships and localised construction techniques.

**4.3 Promoting the use of responsive design: use of appropriate materials, features, building techniques and landscaping in the historic built environment.** The use of appropriate, usually traditional, materials and construction techniques and good design is needed to manage change to existing historic buildings. Choosing solutions for improving energy efficiency that do not harm significance is important for historic buildings. Paying attention to localised vernacular features (e.g. weaver's cottage windows) helps to protect local character and style.

**Promoting the wide understanding of embodied energy in historic buildings and supporting sympathetic adaptive re-use where appropriate.** Existing buildings embody CO<sub>2</sub> emissions in their fabric. Reusing and responsibly upgrading historic buildings in ways that preserve their significance and landscape context is sustainable.

**4.4 Protecting the integrity of designed landscapes, historic parklands and gardens.** There is a need to protect the historic integrity and character of designed landscapes of all sizes while allowing them to evolve sustainably. Opportunities should be sought for enhancing the biodiversity of historic parklands where the structure and character can be appropriately maintained. The production of management plans and partnership approaches with landowners is essential to help positively manage change within these landscapes which can have integral relationships to important historic buildings and usually contain multiple heritage assets

## **Landscape Outcome 5: Promoting a more biodiverse landscape, where Nature Recovery is enhanced**

Nature Recovery Networks are one of six key areas highlighted for action in the 25 Year Environment Plan. A local Nature Recovery Network should protect and restore wildlife, provide greater public enjoyment of the countryside, increase carbon capture and improve water quality and flood management. Landscapes encapsulate the natural beauty that people treasure and that Nature Recovery

Networks should seek to enhance. Therefore, the Landscape Strategy and Landscape Character Areas will provide the guiding principles for Nature Recovery Networks, to understand the place and identify key features, safeguarding and enhancing the beauty and heritage of our landscapes as well as improving its environmental value. In developing a Nature Recovery Network that not only mitigates for, but also adapts to climate change, landscape diversity is important to facilitate resilience.

The Landscape Strategy can provide spatial guidance as to where both a visual and physical change in the landscape can accommodate this, for example through the Wooded landscapes Plan.

**Key Landscape outputs within the Nature Recovery Plan** include:

- 5.1** Restoring and increasing the **resilience of existing priority habitats** and other areas of semi-natural habitats as part of an overall ‘landscape mosaic’.
- 5.2** Supporting the creation, extension and linking of a **mosaic of habitats** in key areas to enhance the existing habitat network. This can include areas on the moorland fringes and alongside limestone dales and river/stream corridors.
- 5.3** Supporting the **diversification** of agricultural grasslands, commercial woodlands and wetland habitats to increase wildlife value and connectivity across the landscape.
- 5.4** Supporting the management and enhancement of **river catchment landscapes** through positive partnership working with statutory undertakers and other stakeholders
- 5.5** Enhancing **nature recovery opportunities** on land in the ownership of conservation organisations, public bodies and statutory undertakers.
- 5.6** Ensuring nature recovery contributes to the **delivery of other ecosystem services** and public goods such as flood risk amelioration, water quality, climate change mitigation and health & wellbeing.

**Landscape Outcome 6: Improving the connectivity of open access land and the rights of way network to allow for enjoyment of the landscape by a greater range of users while maintaining landscape character, tranquillity, remoteness and wildness.**

The National Park attracts people from all ages and walks of life to benefit from escape, adventure, enjoyment, inspiration and reflection in a high quality landscape. The extensive areas of access land and the network of public rights of way and green lanes encourages participation in a range of activities as well as simply ‘getting away from it all’. This exploration of spectacular scenery encourages connection with nature and the cultural heritage of the National Park and helps to sustain physical and mental well-being.

**Outputs for access in the landscape** include:

**6.1 Maintaining the character of the network of lanes, tracks and paths to maximise opportunities to enjoy the landscape.** This includes:

- Retaining and maintaining historic features specific to rights of way, such as packhorse and stone slab bridges, mileposts, and stone squeeze stiles
- Retaining and maintaining boundary walls and hedges
- Maintaining the surfacing of routes in sympathy with their surroundings, their historic nature and commensurate with use
- Encouraging vehicles, including cycles, to keep to tracked surfaces to protect verges and adjacent land

**6.2 Protecting the informal nature of open access land for the enjoyment of the landscape and for its tranquillity, remoteness and wildness.** This includes:

- Limiting signage and waymarking and to a type in keeping with the area
- Limiting new fencelines and new or upgraded tracks and ensuring these are effectively sited and accommodated into the landscape and allow for access
- Supporting land management changes which improve access while maintaining its character and setting

**6.3 Improving the connectivity of the access and rights of way network to allow for enjoyment of the landscape by a greater range of users and for linking with communities.** This includes:

- Clarifying the use of routes not formally recorded or mapped on the ground
- Developing new permissive link routes and multi-user routes
- Enhancing informal access on dalesides where appropriate
- Enhancing access in existing and new woodlands, in former quarries, and water-based at reservoirs where appropriate
- Removal of stiles, steps, and barriers (where not heritage features) and promoting regrading and resurfacing of routes
- Promoting use of local networks
- Enhancing car parking and visitor facilities and retaining roadside laybys where appropriate

**Landscape Output 7: Using our understanding of past human land use and activity to inform our future decision making, enable positive engagement with National Park landscapes, and ensuring that heritage is valued, conserved and enhanced.**

The Peak District landscapes are both natural and cultural and reflect millennia of human interaction with the natural environment. We need to protect, conserve and where possible enhance or better reveal the heritage significance of places and features, and to use an understanding of heritage significance to help us manage landscape change.

Landscape-scale changes that can affect heritage include moorland restoration, woodland creation and natural flood management; understanding how humans have adapted in the past can give us valuable insights into managing the landscapes of the future in the face of huge drivers such as climate change.

In some landscapes the heritage is particularly subtle or buried. Impacts upon heritage assets may be at to an individual site, on a larger landscape scale, or on their setting. The nature and quality of the landscape setting contributes hugely to the significance of some heritage features.

Heritage is a key component of the sense of place. Archaeological and heritage understanding can help shape narratives of inclusion and diversity. By promoting innovative, creative and collaborative engagement with heritage we will encourage a deeper understanding of how our landscapes have developed and how they will continue to develop into the future.

**Key landscape outputs for heritage understanding and engagement** include:

**7.1 Embedding cultural and natural heritage into landscape-scale policies.** Policy should recognise the inter-relationship between our natural and cultural landscapes and look to create benefits that deliver for multiple outcomes, including heritage.

**7.2 Using the historic environment to inform landscape management and future landscapes.** A detailed understanding of the ways in which humans have dealt with climate change and land management in the past (for example historic flood management, water meadows, agricultural adaptations etc.) can

be used to help us develop new approaches for landscape management and climate change resilience and help us imagine our landscapes of the future

### **7.3 Protecting, managing and, where possible, enhancing the rich and diverse heritage of the National Park.**

This includes our moorland heritage; woodland heritage; historic routes of movement; features and landscapes related to the historic extraction and working of lead, stone and other minerals; other historic industries historic water management; features relating to historic and prehistoric agriculture; historic designed landscapes; archaeological cave deposits and underground historic mineral workings; prehistoric monuments and settlement landscapes; buried archaeology; palaeoenvironmental deposits; military heritage and our intangible heritage.

### **Landscape Outcome 8: A landscape where the quality of experience is protected and enhanced**

We aim to encourage people to engage sustainably with the landscapes of the Park. Sustainable engagement is that which respects, conserves and enhances the special qualities of the park landscape.

The Peak District National Park is a living landscape (with almost 40,000 people who live and work in the Park) and is surrounded by large numbers of visitors using the Park for recreation and enjoyment. Lying at the heart of the country, surrounded by urban areas, it is easily accessed by the 16 million people living within an hour's drive. Here, millions of people can get active, escape the pressures of everyday life, explore creative activities and learn about landscapes, cultural heritage and wildlife.

How people experience the landscape (through sight, sounds, smells, touch and emotions) is a vital part of the special sense of place and distinctive special qualities of our National Park. These factors can be intangible, but it is vital we look to identify, protect and enhance these qualities.

**Key 'Quality of experience' landscape outputs** include:

#### **8.1 Protecting, managing and enhancing the natural beauty, lack of obvious development or enclosure, sense of wildness and tranquillity of our moorland** (with its limited enclosure and lack of obvious man-made features), moorland fringes and upland landscapes through:

- Promoting the management of the moorlands and moorland fringes for 'wildness' and 'scenic beauty'. This can include opportunities for new wooded landscape creation in appropriate locations.
- Protecting the sense of remoteness/wildness on the moors through limiting and controlling new fencelines, new tracks and track upgrades to ensure these are necessary (where prior proven need for land management has been demonstrated) and if so, effectively designed, sited / accommodated into the landscape to not conflict with character.
- Limit the development of new infrastructure to that which is essential for the management of these landscapes, and ensure any such development is sited and designed to minimise impact on, or contribute positively to, landscape character and tranquillity.
- Promoting 'mosaic' landscapes and increasing landscape diversity
- Protecting viewpoints to ensure open sweeping vistas and views of dramatic geology are maintained.

#### **8.2 Protecting, managing and enhancing the natural beauty, scenic qualities and cultural value of our pastoral and gritstone / limestone upland landscapes.** This is a settled landscape with a strong sense of 'time-depth' – these landscapes are a 'palimpsest', with many layers of history laid on top of each other:

- Protecting the condition, harmony and diversity of pattern (including settlement and built form), regularity and overall scale of field enclosures while promoting and enhancing biodiversity and a sense of greater ‘wildness’.
- Encouraging the creation of new layers of history, while protecting and celebrating what went before. Encourage the feeling of community, diversity and accessibility in these settled landscapes and the sense of shared history, heritage and culture.
- Ensuring new development does not conflict with landscape and settlement pattern
- Promoting landscape diversity
- Protecting, managing and enhancing the open, sweeping vistas, enclosed by drystone walls and punctuated / filtered by mature trees, across the tranquil and uncluttered upland pastoral and limestone plateau landscapes.

### **8.3 Protecting, managing and enhancing the enclosed, intimate nature of the limestone dales, gritstone cloughs and lower river valleys.**

- Maintaining, restoring and enhancing existing high quality habitats and heritage features, and looking to enhance their future resilience.
- Limiting the development of new infrastructure to that which is essential for the management of these landscapes, and ensuring any such development is sited and designed to minimise impact on, or contribute positively to, landscape character and tranquillity.
- Encourage the maintenance and enhancement of a diverse mosaic of habitats and landscape features, and seek opportunities to enhance the landscape through measures such as new native woodland creation where compatible with other conservation objectives.

## **3.3 Where the outcomes and outputs are important in the Park**

The purpose of this table is to outline the spatial distribution of the landscape objectives – where the outcomes / outputs are particularly important and where less so. The table is divided up on an LCT basis and is then grouped and summarised by LCA.

A ● means that this is particularly relevant to the landscape character type and a □ means that this guideline has some relevance to the landscape type.

**TABLE PROVIDED AT APPENDIX 1A**