

2. White Peak

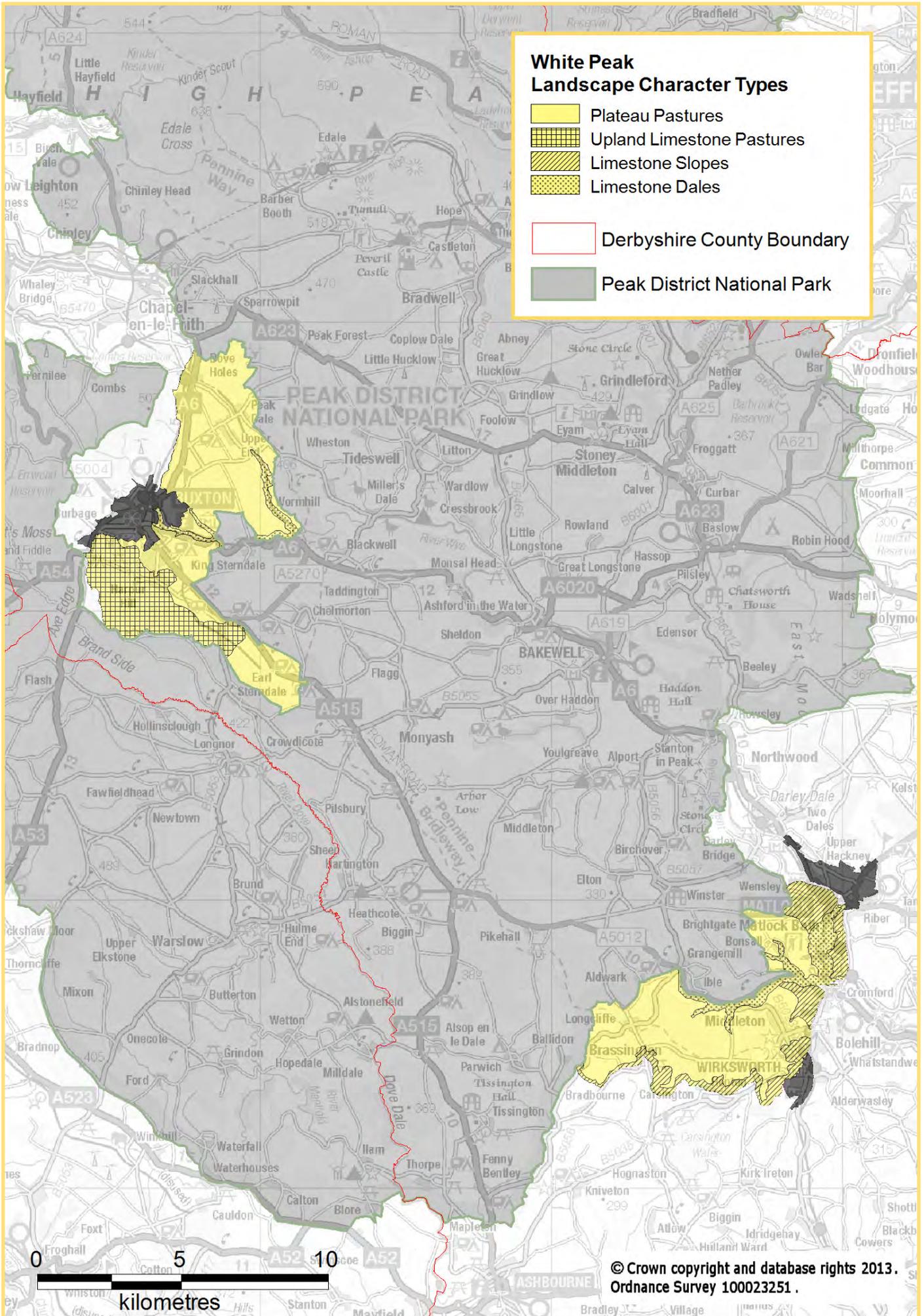


Landscape Character Types

- Plateau Pastures 2.5
- Upland Limestone Pastures ... 2.10
- Limestone Slopes 2.13
- Limestone Dales 2.17

White Peak Landscape Character Types

-  Plateau Pastures
-  Upland Limestone Pastures
-  Limestone Slopes
-  Limestone Dales
-  Derbyshire County Boundary
-  Peak District National Park



© Crown copyright and database rights 2013.
Ordnance Survey 100023251 .

White Peak

CHARACTER AREA 52

A gently rolling upland, limestone plateau punctuated by steep sided dales, scattered villages and isolated farmsteads within a pastoral setting.

Landscape Character Types

- Plateau Pastures
- Upland Limestone Pastures
- Limestone Slopes
- Limestone Dales

"... it was veined with a network of old stone walls, dividing the fields, and broken here and there with ruins of old lead-mines and works. A sparse stone farm bristled with six naked sharp trees. In the distance was a patch of smoky grey stone, a hamlet stone fences under the sky, looking for the curves downward that indicated a drop to one of the underneath, hidden dales."

DH Lawrence 'The Virgin and the Gypsy'

Introduction

The White Peak character area is located in the west of the county, most is within the Peak District National Park. It stretches from Castleton in the north, to Wirksworth in the south. An upland landscape, comprising a limestone plateau and deep limestone dales, it includes the spa towns of Matlock Bath in the east and Buxton in the west. It strongly contrasts with the adjacent gritstone landscape of the Dark Peak to the north and west, whilst the transition to the Peak Fringe in the south is more gradual.

Physical Influences

The White Peak is strongly influenced by the weathering and erosion of the underlying Carboniferous Limestone, formed 350 million years ago by the deposition of calcium carbonate - rich skeletal remains upon the seabed. Hydrothermal veins associated with volcanic activity left vast mineral deposits of galena (lead ore), fluor spar, calcite, copper and barytes which run through the bedrock.

The majority of the limestone plateau has deposits of silty, wind-blown drift (brown stoneless silts) over the limestone bedrock. These mask the influence of the limestone at the soil surface giving rise to

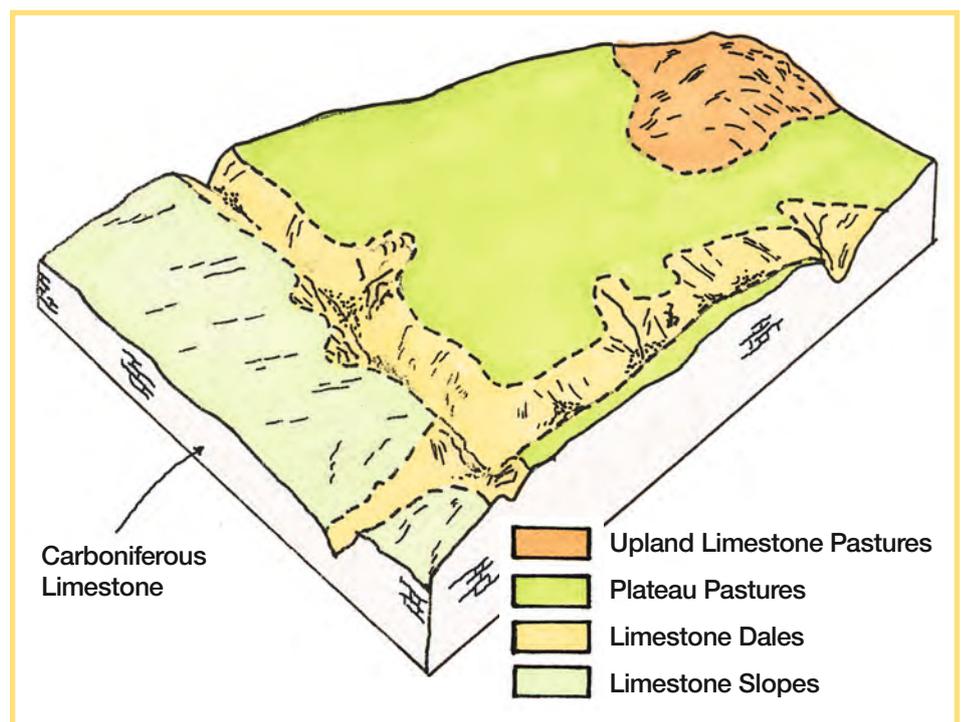
neutral or acidic soils. These soils are well-drained, dark brown silt-loams farmed as pasture and rough grazing. The soils of the upper plateau tend to have deeper deposits. Here the drift has formed a matrix with the coarse, resistant silica residues of weathered limestone. The soils formed are naturally coarse, thin peaty soils. These soils support rough grassland or a mosaic of heathland shrubs.

Glacial meltwaters and large streams dissecting the soft bedrock were responsible for the creation of the *Limestone Dales*. The erosion of the limestone occurred above and

below ground with water finding its way into faults and fissures, creating caves and caverns. Over time these would collapse to form steep sided slopes of exposed stone. Some dales still have rivers and streams meandering through them, but others are seasonal or dry at the surface, the water passing through a series of underground cave systems. Today, the dry dales maintain a character similar to that of the wet dales.

Natural Influences

The White Peak is significant in Britain, as the junction between southern and northern species of



plants and animals. Variations in landform, soil and a diverse history of agricultural improvements have produced a broad range of wildlife habitats and associated species, many of which are of national and international importance.

The main habits on the plateau today are grasslands associated with dairy farming and rough grazing. Unimproved, species-rich, hay meadow and pasture are of greater value for wildlife but have declined dramatically due to agricultural intensification. The majority of grassland is improved for grazing and silage or haylage production. Occasional flower rich meadows and calcareous grasslands can be found in the *Plateau Pastures* but are more commonly restricted to the *Limestone Dales* and roadside verges.

Ancient semi-natural woodland is a feature of the *Limestone Dales* but does not generally occur elsewhere within the area. Defined by irregular outlines and a mixture of broadleaved tree species, predominantly ash, they are associated with the steepest valley sides. Overall, tree cover is a strong feature of the dales. The *Plateau Pastures* are not densely wooded; it is an open landscape with expansive views. Small plantations, shelter belts and localised tree groups around settlements, made up of usually sycamore or beech, are a distinctive feature.

Following early forest clearance and the leaching of lime, the naturally alkaline soils became acidic and supported heathland species, which became dominant by the sixteenth century. The remaining heathland is very small and fragmented, mainly occurring on uncultivated land, like road verges and railway embankments.

Wetland habitats are generally confined to the *Limestone Dales*. The rivers of the dales are of high water quality and are therefore valuable to wildlife. The permeable

nature of limestone and the upland topography means the plateau has no significant wetland habitat. Dew ponds or 'meres', are an exception. They were constructed on the plateau as watering holes for cattle by lining a hole with clay and sand. These ponds are valuable for some aquatic species and amphibians such as freshwater snails and newts, as well as being distinctive landscape features.

Human Influences

The White Peak has been a focus of settlement since early prehistoric times and numerous surviving monuments indicate the extent of settlement and use of the landscape. These include Neolithic henge monuments like the Bull Ring at Dove Holes. Bronze Age round barrows survive in numbers on the crests of hills and late prehistoric and Romano-British settlements and field systems like Rainster Rocks, Brassington also survive, as do rare examples of burial mounds of Anglo-Saxon date.

Field patterns within the White Peak are not as diverse as those in surrounding character areas, largely as a result of a relatively simple

topography. The characteristic dry-stone walls, constructed from local limestone, dominate the landscape. Isolated stone barns were often incorporated within the stone walls, forming a distinctive feature of the area, although many have become derelict.

The strip fields around villages are a distinctive feature of the *Plateau Pastures* and *Limestone Slopes*. They indicate the piecemeal enclosure of an earlier open field system. Later, private or parliamentary field enclosure of former wastes and commons is well represented throughout the area, particularly within *Plateau Pastures* and *Upland Limestone Pasture*. In these areas, the field patterns are typically regular in shape, of medium to large size, dissected by straight roads. The field walls have been built using quarried stone and are neater in appearance than the random rubble walls of earlier periods.

The *Limestone Dales* are largely unenclosed due to the inaccessible nature of the steeper slopes. Stone walls are occasionally found cutting across the valleys, but many of these are now falling into disrepair.



Open expansive view across the limestone plateau

The limestone has been exploited on a small scale for hundreds of years but large scale quarrying has occurred in more recent times. Modern quarries have had a major visual impact on the landscape, leaving large voids that can be seen for miles across the open plateau. Other naturally occurring minerals, running in veins through the limestone, have also been exploited. Lead ore has been mined from Roman times to the early 20th century and, at times, brought significant wealth to the area. Although lead mining is no longer a major industry, the evidence of past workings are still present and are especially associated with the *Plateau Pastures*.

The White Peak is not a densely settled landscape. There are nucleated villages within *Plateau Pastures* and *Limestone Slopes*, many originating in Saxon and

medieval times, usually connected by straight enclosure roads. The traditional building material is random rubble local limestone with roofs of stone slates brought from the Dark Peak area.

These limestone villages are a key characteristic of the area. Outside the villages, isolated farmsteads occur, again constructed of the local limestone with stone tile or slate roofs. The *Limestone Dales* remained largely unsettled due to their topographical inaccessibility.

Within villages, lanes are characteristically narrow and winding, often with variable width verges reflecting the undulating nature of the surrounding landscape. Between the settlements there is a network of straighter, more direct roads. Modern transport links, such as the A6, and railway lines utilise the

valleys of the *Limestone Dales*, as components of routes through the county.

A very good example of the way this landscape has been overlain by successive periods and types of man's activity may be seen around Rainster Rocks, north-west of Brassington. Here the earthwork remains of a Romano-British settlement lie adjacent to extensive medieval ridge and furrow which, in turn, are overlain by the remains of lead mining and the field walls of 19th century enclosures.

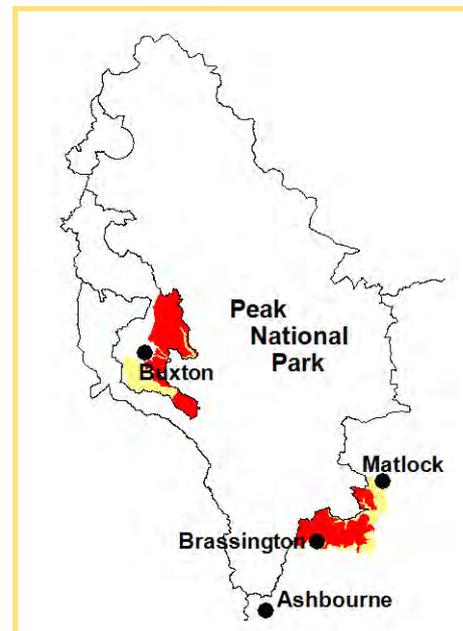
Other Considerations

- Peak District National Park
- PDNP Landscape Strategy & European Landscape Convention Action Plan
- Peak District BAP

White Peak

LANDSCAPE TYPE: PLATEAU PASTURES

A gently rolling, upland limestone plateau characterised by nucleated limestone villages, dry-stone walls, a pastoral land-use and open, expansive views.



Key Characteristics

- A gently rolling upland plateau
- Limestone outcrops on hill summits and steeper slopes
- Fine, silty brown soils over Carboniferous Limestone
- Stock rearing on improved pasture
- Small shelter blocks of plantation woodland and tree groups around villages and farmsteads
- Medium to large regular fields enclosed by dry-stone walls with narrow strip fields around settlements
- Straight roads with uniform verges
- Nucleated limestone villages and isolated limestone farmsteads with slate roofs
- Small isolated field barns
- Small pits and hummocks in areas of historic lead mining
- Open landscape with expansive views

Pasture, and particularly dairying, is the dominant land-use in this landscape. Most of the fields have been ploughed and reseeded to improve the pasture. Some unimproved grassland is still found where the ground is unsuitable for cultivation such as on the more exposed crests and steeper slopes where soils are thin and often grazed by sheep.

Ecology

Prior to enclosure, these landscapes would have been covered with semi-natural, neutral grassland, with calcareous grassland and some scrub on the steeper, thinner soils. However, since enclosure, much of the ecological value has diminished with remnant habitats now confined to the more marginal hillcrests and slopes where exposed rock is prevalent. Very occasional patches of unimproved pasture may still be encountered in less intensively farmed areas and on the verges of green lanes and trackways. There is little floristic interest in the improved grassland that exists today.

Geology and Landform

The underlying Carboniferous Limestone strongly influences this landscape creating a broad upland plateau. The limestone bedrock is hard and slowly eroded, giving rise to a moderately rolling landform of numerous minor hill summits with exposed rock. Large areas of limestone were subsequently overlain with a variable thickness of Aeolian drift adding to the subdued nature of this rolling plateau and masking the influence of the limestone on soil and vegetation.

Soils and Land-Use

The soils are well-drained, fine, silty brown earths over a free-draining bedrock and Aeolian drift. These are characteristically shallow to moderately deep, being shallowest on the steeper slopes and hillcrests. Deeper soils tend to be associated with deeper accumulations of drift. Any calcareous influence from the underlying geology is counteracted by the high elevation of this plateau, where high annual rainfall is common, leaching occurs and soils are naturally acid.

Where vein minerals, and particularly lead, outcrop at or near the surface, these have been exploited by small scale quarrying. Some of the resultant spoil and disturbed land associated with such workings have created local historic landscape features in the area. These often support very rare vegetation swards with specialist species like leadwort.



Leadwort

Tree Cover

This exposed upland plateau is inherently sparsely wooded. Following the initial clearance of woodland, extensive grazing by livestock would have prevented regeneration. At the time of enclosure there would have been few timber trees. During the enclosure of this landscape, small plantation blocks and shelterbelts were planted, and small tree groups associated with isolated farmsteads are also a characteristic feature. Many of the plantations are non-native, comprising mainly of sycamore and beech.

Tree cover is more apparent around the villages where there are scattered boundary trees adjacent to some walls and small amenity groups within the settlement and around individual dwellings. The dominant species is ash, although sycamore is prevalent often replacing ash trees.

Adjacent to some field boundaries, isolated hawthorns have established. Some areas are more wooded than others but the overall effect is that of an open landscape with expansive views.

Enclosure

Dry-stone walls constructed from the local limestone enclose medium to large regular fields. The dry-stone walls are distinctive being constructed of random sized limestone rubble. Many of the walls are straight and, together with the regular shaped fields, reflect the relatively late enclosure of this landscape from waste and common.

Contrasting with the broader plateau there are narrow strip fields around the villages that create a very prominent and distinctive field pattern. The strip fields are indicative of enclosure from open fields, and much of this enclosure may have been piecemeal taking place over a long period of time.

Transport

Roads within villages can be quite dense and winding with variable width verges often centred on a village green. However, these roads extend from the village centre and quickly give way to the more direct roads of the landscape beyond. A dense network of green lanes and tracks supplements this road network.

The roads beyond the village are straight and direct, having uniform width verges again reflecting the later enclosure of this landscape. The roads connect the sparsely scattered farmsteads established at the time of enclosure. Moor Lane is a commonly recurring road name emphasising the former unenclosed waste and common. One notable road in this landscape is the A515, which runs for a large part on the line of a former Roman road.

Built Environment

A landscape containing nucleated villages like Monyash, Chelmorton and Taddington. The limestone village is a key characteristic. Cottages and farmsteads are constructed from the local Carboniferous Limestone, often random rubble, with stone and Welsh slate roofs.

Between villages there are sparsely scattered farmsteads, established at the time of parliamentary enclosure. Again, these are traditionally constructed from the local limestone, often random rubble, with slate roofs. Outside the village centre there are many small, isolated stone barns located along the boundaries of fields and integrated into the dry-stone walls.



Narrow, fossilised strip fields around villages

The limestone plateau has a strong association with the former lead mining industry and there is still evidence of this in areas where fields have small pits and hummocks, creating, in parts, a relict industrial landscape.

Quarrying, in general, is a prominent feature. Once small in scale, large modern quarries with their associated plant now dominate some areas.

Summary

The Plateau Pastures is a simple yet distinctive pastoral landscape strongly influenced by the underlying geology. The Carboniferous Limestone has given rise to an elevated and, for the most part, gently rolling upland plateau. This elevation, allied to the general lack of tree cover, allows for long distance and panoramic views.

The soils are inherently thin over the limestone and regularly leached by the high rainfall. As a result, the predominant land-use is stock rearing associated with dairying and many of the fields are down to improved permanent pasture.

The cultural patterns of this landscape are strong and very distinctive. The whole of the plateau is divided into regular shaped fields enclosed by dry-stone walls. There are discrete limestone villages scattered across the plateau. Very distinctive small and narrow strip fields, again enclosed by walls, suggesting the extent of former open fields, surround the villages.

Tree cover is also a distinctive feature, although it is rarely visually prominent. It occurs primarily as small plantation blocks and shelter belts sparsely scattered throughout the landscape with localised trees and tree groups associated with villages and isolated farmsteads.

The unifying influence of the limestone as a locally distinctive building material, together with strong pastoral traditions and lack of modern development, ensures that the landscape retains its rural character.

LANDSCAPE TYPE: PLATEAU PASTURES

Planting and Management Guidelines

Open, pastoral landscape on a rolling upland plateau punctuated by sparsely scattered, but visually prominent, small plantations with tree groups around farmsteads and settlement.

Excluding the Peak District National Park

Primary woodland character: Thinly scattered small plantations

Primary tree character: Localised amenity tree groups

Woodland vision: Thinly scattered small plantations

Tree vision: Localised amenity tree groups

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

Note

Plantation woodlands primarily planted for shelter, comprised mainly of sycamore and sometimes beech, are visually striking features of this landscape character type. Their dense crowns and lack of understorey vegetation often creates silhouetted skyline features contrasting in the wider landscape with the naturalistic upland ash woods of the limestone dales. As a key landscape characteristic, and within the context of the visual appearance of this landscape, there is a strong argument to conserve and enhance this distinctive woodland character. The woodland species mix has been developed to take account of this fact.

Woodland Species Mix

Base-Rich Soils

Primary Tree Species 85%

‡ *Acer pseudoplatanus* Sycamore

Secondary Tree Species 5-15%

‡ *Fagus sylvatica* Beech

‡ *Fraxinus excelsior* Ash

Ulmus glabra Wych Elm

Shrubs 0-10%

Major

Corylus avellana Hazel

Crataegus monogyna Hawthorn

Ligustrum vulgare Wild Privet

Minor

Cornus sanguinea Dogwood

Ilex aquifolium Holly

Prunus spinosa Blackthorn

Viburnum opulus Guelder Rose

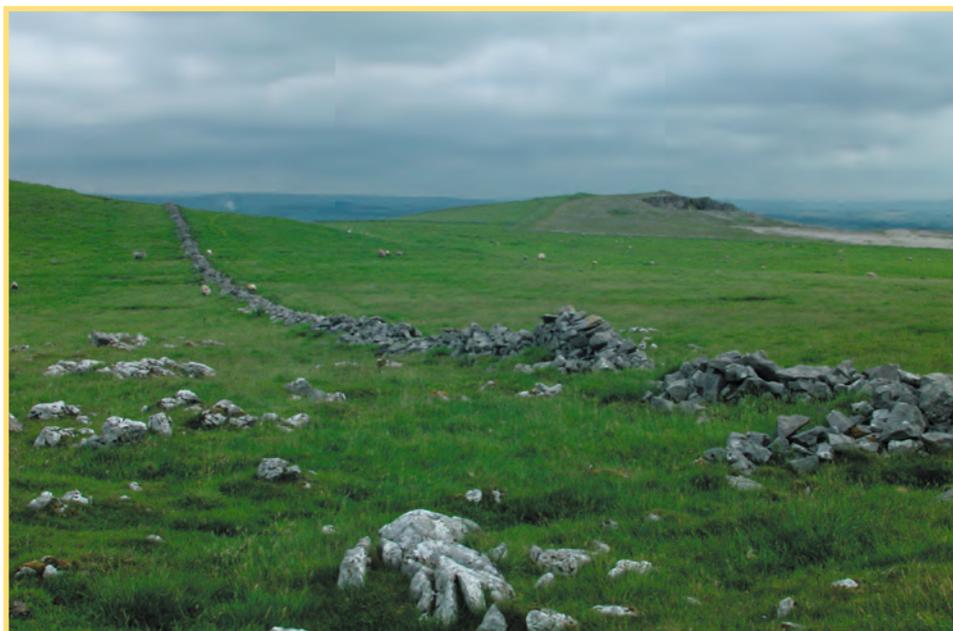
Open space 0-20%

‡ **Amenity Trees** - tree species most appropriate for planting as amenity trees associated with settlement, or other locally occurring large woodlands species.

White Peak

LANDSCAPE TYPE: UPLAND LIMESTONE PASTURES

An undulating highland landscape of rough grazing and stock rearing, with prominent limestone outcrops and open, expansive views.



Key Characteristics

- Undulating highland plateau with steep slopes
- Very shallow loamy soils over Carboniferous Limestone
- Frequent bare rock outcrops and scree slopes
- Extensive stock rearing and rough grazing
- Occasional plantation block but essentially a treeless landscape
- Large regular fields bounded by dry-stone walls
- Mainly unsettled with occasional farmstead built in stone with slate roof

Geology and Landform

The underlying Carboniferous Limestone strongly influences this upland landscape, creating an undulating or steeply sloping extension to the highland plateau. The limestone bedrock is hard and slowly eroded which gives rise to a moderately undulating landform of numerous hill summits with extensive amounts of exposed rock. This is the most elevated part of the broader limestone plateau.

Soils and Land-Use

The soils are very thin, silty and loamy brown rankers, over limestone. These soils are strongly

associated with limestone outcropping and are often stony. At these elevations they resemble humic rankers, having organic matter in the surface horizons.

These soils support rough grazing and, because of their free-draining nature and ability to absorb excess winter rain, offer little risk of poaching during the winter months.

Ecology

The ecological value of this landscape lies in the extensive area of unimproved grassland. Other features of interest include the large amounts of exposed rock and associated scree.

Tree Cover

Owing to the exposed terrain and the fact that the soils are too shallow to allow adequate rooting, this is a treeless landscape. There is the occasional tree group associated with an isolated farmstead and very occasional small woodland blocks in more sheltered areas with deeper soils. There is also some recent afforestation for commercial purposes but most of these trees are poorly growing.

Enclosure

Dry-stone walls constructed from the local limestone enclose large regular fields. These walls are distinctly constructed of random sized limestone rubble. They form straight boundaries and, together with the regular shaped fields, reflect the relatively late enclosure of this landscape from waste and common. Many of the walls are in a very poor condition and no longer function as stock-proof boundaries.

Transport

The few roads which cross this landscape are often winding, following the undulating nature of the landform. Dry-stone walls form the boundary to some lanes whilst others are often unfenced.

Built Environment

This is essentially an unsettled upland landscape with only the very occasional isolated farmsteads, although some of these are now deserted. Lime burning was a major industry in the area, as can be seen

around Grin Low. However, human influence is still evident with the presence of large limestone quarries and their associated processing plants. Some quarries are modern and still operational whilst others are now disused and even reclaimed.

Summary

This is a landscape associated with the most elevated parts of the broader limestone plateau with an altitude between 350m and 450m AOD. The underlying limestone strongly influences this upland landscape, the form of which is moderately undulating with some steep slopes. Exposed rock is a common feature, giving the landscape a distinctly rugged appearance.

Soils are thin but, with the high levels of rainfall in these upland areas, they are characterised by humic surface horizons. As such, they allow for a marginal agricultural landscape, characterised by rough grassland, grazed by sheep. Although this landscape was enclosed at the time of parliamentary enclosure to create large regular fields, many of the walls are now in disrepair adding to the rocky nature of this landscape. With the walls effectively inoperable as stock-proof boundaries, sheep graze freely throughout this landscape.

Aspect, exposure, shallow soils and extensive sheep grazing has ensured that this landscape has retained an unwooded character with trees only obvious when planted as a small tree group associated with the very occasional farmstead.

Planting and Management Guidelines

An undulating upland landscape of rough grazing with no trees.

Excluding the Peak District National Park

Primary woodland character: Open/unwooded

Primary tree character: Treeless

Woodland vision: Open/unwooded

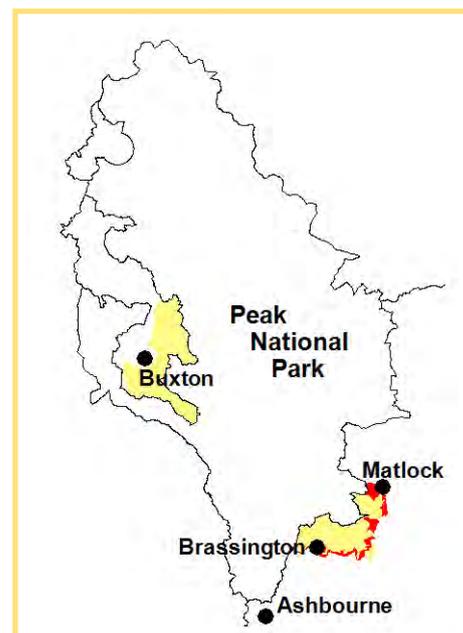
Tree vision: Treeless

- Where opportunities arise, the removal of coniferous plantation woodland should be encouraged as the existing character is open and unwooded.

White Peak

LANDSCAPE TYPE: LIMESTONE SLOPES

A landscape of small, nucleated limestone villages and dispersed farmsteads nestling within moderate to steeply sloping limestone slopes. Distinctive dry-stone walls enclose former open fields and semi-regular fields with a pastoral land-use.



Key Characteristics

- Steep slopes
- Localised bare rock outcrops on steeper slopes
- Fine, silty brown soils over silty, Aeolian drift over Carboniferous Limestone
- Stock rearing on permanent pasture
- Small semi-regular and strip fields enclosed by dry-stone walls
- Villages with limestone and slate roofed farmsteads and cottages
- Small, isolated field barns
- Small pits and hummocks in areas of historic lead mining

Geology and Landform

The underlying geology strongly influences this upland landscape creating a moderate to steeply sloping fringe to the limestone plateau. The Carboniferous Limestone is hard and slowly eroded giving rise to an undulating landform with many minor hill summits and extensive amount of exposed rock.

Soils and Land-Use

The soils are fine loamy brown earths over a free-draining bedrock

and Aeolian drift. These are characteristically shallow to moderately deep, being shallowest on the steeper slopes and hillcrests. Deeper soils tend to be associated with the deeper accumulations of drift.

Pasture, and particularly dairying, is the dominant land-use with much of the land being farmed in a low-intensity system. The steepness of the slopes, allied to the thin soils and rocky outcrops, seriously restrict opportunities for providing improved pasture.

Ecology

Ecological value lies in the extensive area of unimproved grassland typically dominated by common bent and sheep's fescue. Where pasture has been abandoned, or on the steepest more sheltered slopes, scrub is beginning to colonise. This sometimes occurs with localised patches of gorse and bracken. Other features of interest include exposed rock and scree with their associated flora and fauna. There are also habitats of particular interest in areas of former lead mining.

Tree Cover

Tree cover is apparent throughout this landscape with scattered boundary trees, small woodland blocks and extensive patches of scrub colonising abandoned pasture. Most of the woodland is associated with the steeper, less cultivable slopes where soils are thinnest and stony.

The overall effect is that the trees provide filtered views through the

landscape, although there are long distance views to the slopes beyond as a result of the sloping topography.

Enclosure

Dry-stone walls constructed from the local limestone enclose small to medium, semi-regular fields. The walls are distinctive being constructed of random sized limestone rubble. With the abandonment of some pasture, many of them have been neglected and are in a poor condition.

Transport

There is a dense network of winding lanes with irregular width verges. Most of the lanes connect the small villages and farmsteads, winding themselves through the landscape and avoiding the steepest slopes. There are also a number of green lanes and footpaths like the Limestone Way that run between the settlements.

Built Environment

This is a settled landscape of nucleated limestone villages and scattered farmsteads and cottages. These are traditionally constructed from the local limestone, often random rubble, with stone or Welsh slate roofs.



Limestone villages nestled into the landscape

Outside the settlements, there are isolated stone barns located along the boundaries of fields and integrated into the dry-stone walls, many of which are now derelict.



Isolated barn on Bonsall Moor

Other features in this landscape are the small pits and hummocks found in many fields, associated with the historic lead mining industry. Most of the remains date from the 17th to 19th centuries, although some are earlier. Quarrying in general is a prominent feature. Once small in scale, large modern quarries with their associated plant now dominate some areas.

Summary

This is a landscape strongly influenced by the Carboniferous Limestone geology creating a moderate to steeply sloping fringe to the limestone plateau. The hard and resistant rock is slowly eroded giving rise to an undulating landform with minor hill summits and areas of exposed rock.

The soils are characteristically variable relating to landform, being thinnest on the steepest slopes and hillcrests. The thin soils allied to the steepness of some slopes and the extent of exposed rock ensures that unimproved pasture and rough grazing supports low-intensity grazing by livestock.

The landscape is well settled with villages and scattered farmsteads traditionally built in the local limestone with stone slate roofs. Beyond the village and scattered throughout there are small stone field barns often integrated into the dry-stone walled boundaries.

Unlike other areas of the limestone plateau, tree cover tends to be more apparent occurring as scattered trees or trees groups around settlements but also as small woodland blocks and extensive patches of scrub colonisation. The trees filter views through the landscape but there are open long distance views to slopes beyond.

Planting and Management Guidelines

Moderate to steeply sloping pastoral landscape with scattered small plantations, occasional semi-natural woodland and small tree groups around farmsteads and settlement.

Excluding the Peak District National Park

Primary woodland character: Thinly scattered small plantations and semi-natural woodland

Primary tree character: Localised amenity tree groups

Woodland vision: Thinly scattered small-medium plantations

Tree vision: Localised amenity tree groups

Typical woodland size range: 0.5-15ha small-medium

Woodland pattern: Regular/ organic

- Small scale woodland planting.
- Promote linked extensions to ancient woodland by natural regeneration and planting.
- Ensure a balance is maintained between new woodland planting and areas of nature conservation value.
- Encourage the management of scrub and secondary woodland to link with existing habitats and woodland.
- Conserve and enhance the tree groups that occur within and around rural settlements and isolated farmsteads.
- Ensure new woodland does not conflict with features (e.g. ridge and furrow) that help to define landscape character.

Woodland Species Mix

Calcareous Soils

Primary Tree Species 50%

<i>Acer campestre</i>	Field Maple
‡ <i>Fraxinus excelsior</i>	Ash

Secondary Tree Species 20%

Major

<i>Malus sylvestris</i>	Crab Apple
<i>Sorbus aucuparia</i>	Rowan
<i>Ulmus glabra</i>	Wych Elm

Minor

<i>Prunus padus</i>	Bird Cherry
<i>Taxus baccata</i>	Yew

Shrubs 10-30%

Major

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

Minor

<i>Cornus sanguinea</i>	Dogwood
<i>Ilex aquifolium</i>	Holly
<i>Prunus spinosa</i>	Blackthorn
<i>Viburnum opulus</i>	Guelder Rose

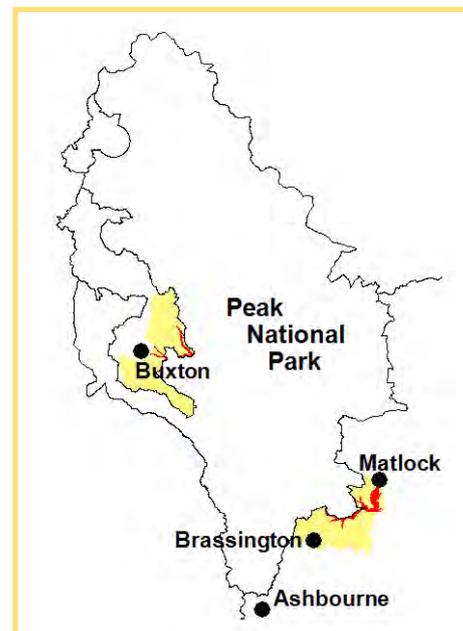
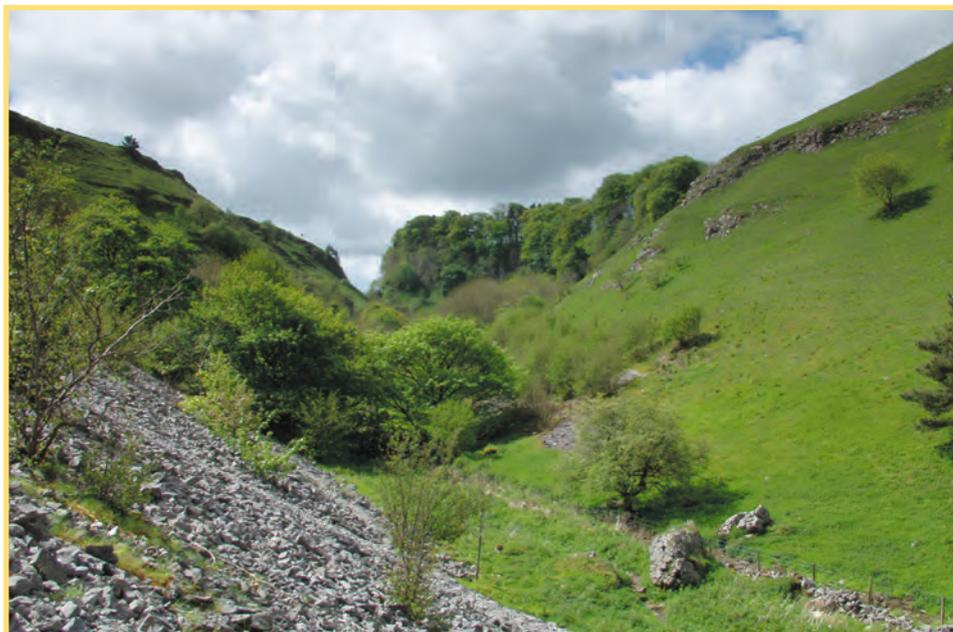
Open space 0-20%

‡ **Amenity Trees** - tree species most appropriate for planting as amenity trees associated with settlement, or other locally occurring large woodlands species.

White Peak

LANDSCAPE TYPE: LIMESTONE DALES

Narrow, deeply incised river valleys with steep slopes and extensive amounts of exposed rock. There are blocks of ancient woodland, areas of scrub and rough grassland grazed by sheep.



Key Characteristics

- Very steeply sloping valley sides
- Frequent bare rock outcrops and scree slopes
- Very shallow loamy soils over Carboniferous Limestone
- Rough grazing by sheep in enclosures bounded by dry-stone walls
- Blocks of ancient woodland
- Areas of scrub dominated by hawthorn

Narrow strips of alluvial soils are found along the Dove and the Wye associated with the narrow flood plain.

As the slopes are often too steep for improved pasture or afforestation, the land is used mainly for rough grazing by sheep. This semi-natural grassland is of good grazing value.

Geology and Landform

Narrow, steep sided valleys have been cut into the Carboniferous Limestone by the headwaters of minor streams and rivers flowing away from the limestone plateau. The principal rivers forming these dales are the Wye, the Lathkill and the Dove. The result is a series of distinctive limestone dales. In contrast to wet dales, many of the smaller dales are dry, owing to the fact that water percolates through the bedrock.

The dale sides have frequent outcrops of the grey-white limestone sometimes forming precipitous rock buttresses with scree slopes.

The rivers are fast flowing with a rocky river bed giving a strong sense of movement.

The steep valley sides with rock outcrops, in association with the narrow river corridor, create a strong feeling of containment.

Soils and Land-Use

Very shallow, loamy, upland soils lie over the limestone. These soils are thinnest on the steeper rocky slopes and deeper in the valley floor. Dark humose surface horizons predominate; most soils are non-calcareous but calcareous soils also occur.

Ecology

The ecology of these dales is an intimate mix of semi-natural habitats, ranging from deciduous woodland dominated by ash, scrub woodland with hawthorn and large tracts of unimproved grassland. The low grazing pressure on these slopes distinguishes them from other limestone landscapes and maintains the floristic diversity of the grasslands. The grasses are characterised by fescues and many small herbs like common rockrose, wall-pepper and wild thyme can be found on the rockier soils and outcrops.



Cowslips and orchids

The river channel is an important ecological corridor and often retains its natural bank profiles with some occasional, marginal, aquatic vegetation and riparian trees.

Tree Cover

Tree cover is a key feature of these dales although its extent is variable. Some valley sides, like those in the Wye Valley, are extensively wooded with broad tracts of ancient semi-natural woodland. In other valleys, woodland cover is more sporadic and is associated with scrub woodland dominated by hawthorn.



Wood anemone in ancient woodland

Where broad-leaved woodland prevails it tends to be dominated by ash with hazel although sycamore is now common. There are also some scattered trees along the riverbanks dominated by willow and hawthorn.

Overall, the woodland cover coupled with the steep valley sides can create a strong sense of enclosure and visual containment.

Enclosure

This is essentially an unenclosed landscape although occasional dry-stone walls divide the valley. Many of these walls are now neglected and in poor condition.

Transport

Some of these dales have been utilised as transport corridors with major roads and railways running in the valley bottom or on the valley sides. This is particularly notable in



The A6 through Wye Dale

the Wye Valley where the main A6 trunk road and a railway line run up the valley.

Now the railway lines are mainly disused, many have become attractive recreational routes. Where dales have been unaffected by transport links they remain relatively unspoilt, accessed only by footpaths and bridleways, often steep in places.

Built Environment

Human habitation is not a feature of these limestone dales owing to their topographical inaccessibility. Some man-made activities do impact in the form of modern quarries, lead mining remains and water management systems. Occasional mills built in the local stone to harness water power survive, generally converted to other uses.

Although many dales remain uninhabited, there has been extensive urbanisation of the Matlock dale through Matlock Bath and its feeder valleys of the Bonsall Brook and Via Gellia. Matlock Bath is a late Georgian and Victorian creation, developed as a popular spa and inland resort. Many of the Regency and Victorian villas, and terraces are built in brick finished with stucco rather than the local stone.

Summary

The headwaters of minor streams have carved through the Carboniferous Limestone geology to form narrow, deeply incised and steeply sloping valleys. The valley sides are characterised by steep, rocky cliffs and scree slopes, making them inaccessible for most uses other than rough grazing by sheep.

Thin soils and light grazing have ensured that many of the original habitats, such as ancient woodland and species-rich calcareous grassland, have remained in excellent condition and support species of national importance.

Many dales have been utilised as transport corridors, where roads and railways run parallel to the narrow watercourse. Some former railway lines have been converted to long distance footpaths and bridleways.

The steep valley sides and rocky cliffs, coupled with the narrow valley sides, impart a strong sense of enclosure and visual containment. Where the dales remain free of infrastructure, they retain a tranquil and secluded character, although paradoxically, this tranquil character attracts heavy recreational use.

Planting and Management Guidelines

Narrow, deeply incised river valleys with widespread semi-natural woodland, much of ancient origin and scattered watercourse trees.

Excluding the Peak District National Park

Primary woodland character: Widespread large semi-natural broadleaved woodlands

Primary tree character: Scattered watercourse trees

Woodland vision: Widespread large woodlands

Tree vision: Scattered watercourse trees

- Conserve and restore all ancient woodland sites by natural regeneration or use of locally occurring native species.
- Ensure the use of indigenous tree and shrub species, including a proportion of large, long-lived species.
- Ensure a balance is maintained between new woodland planting and areas of nature conservation value.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.

Woodland Species Mix

Calcareous Soils

Primary Tree Species 50%

<i>Acer campestre</i>	Field Maple
<i>Fraxinus excelsior</i>	Ash

Secondary Tree Species 20%

Major

<i>Malus sylvestris</i>	Crab Apple
<i>Sorbus aucuparia</i>	Rowan
<i>Ulmus glabra</i>	Wych Elm

Minor

<i>Prunus padus</i>	Bird Cherry
<i>Taxus baccata</i>	Yew

Shrubs 10-30%

Major

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

Minor

<i>Cornus sanguinea</i>	Dogwood
<i>Ilex aquifolium</i>	Holly
<i>Prunus spinosa</i>	Blackthorn
<i>Viburnum opulus</i>	Guelder Rose

Open space 0-20%

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

Waterlogged Conditions on all soil types

Primary Tree Species 50%

<i>Alnus glutinosa</i>	Alder
<i>Fraxinus excelsior</i>	Ash
† <i>Salix fragilis</i>	Crack Willow

Secondary Tree Species 20%

Major

<i>Betula pubescens</i>	Downy Birch
-------------------------	-------------

Minor

† <i>Salix capraea</i>	Goat Willow
† <i>Salix cinerea</i>	Grey Willow

Shrubs 10-30%

Major

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

Open space 0-20%

