

## LCT 7: Limestone Dales Landscape Character Type



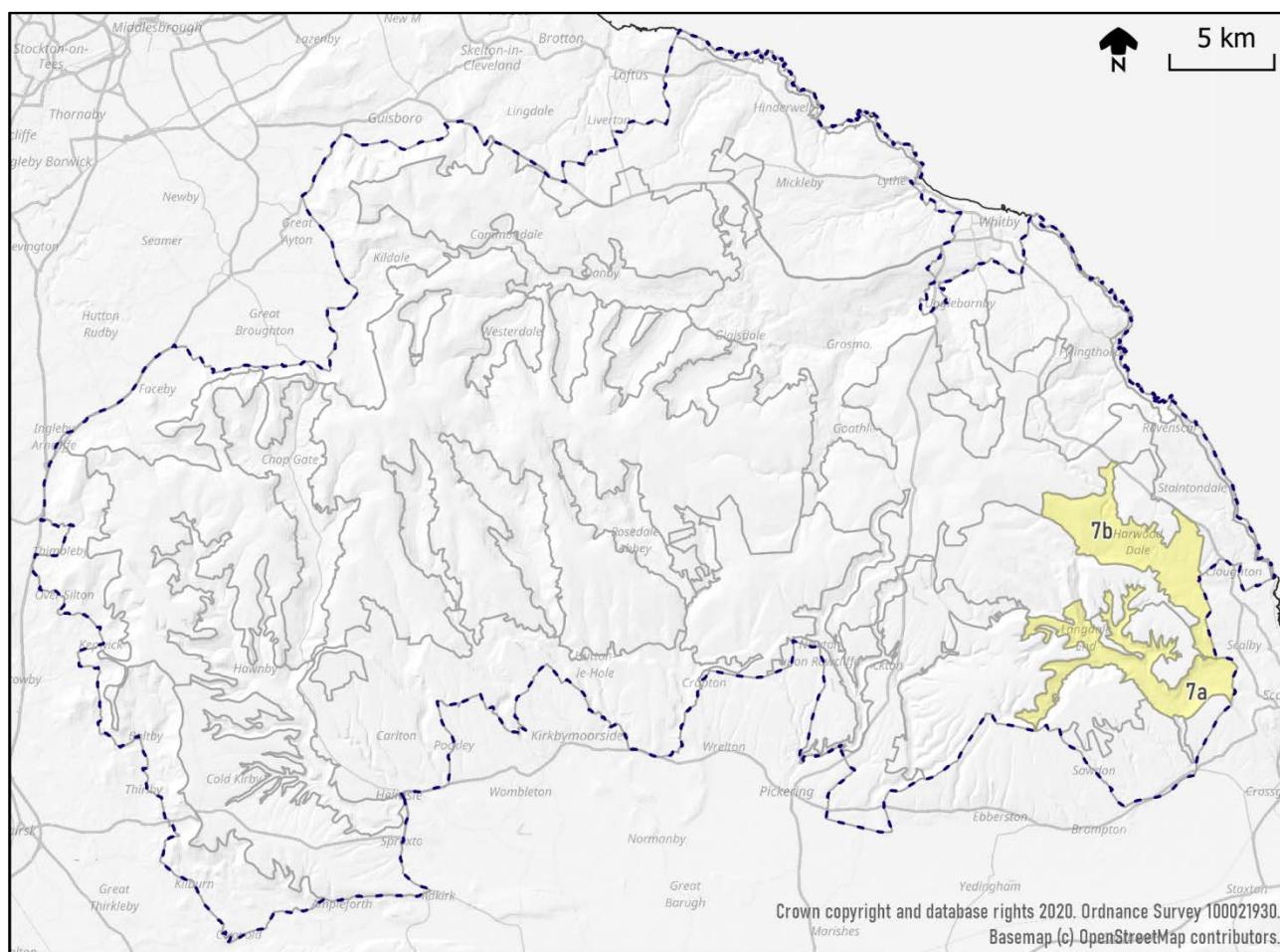
Fig.103 A typical scene within the Limestone Dales Landscape Character Type at Broxa Lane, Derwent Valley

### Location, Context and Setting

This Landscape Character Type (LCT) is located in the south-east corner of the North York Moors National Park, and comprises the dales cut through the Corallian Limestone. It contains the small villages of Hackness and Harwood Dale, as well as smaller hamlets and farms. It is surrounded by, and strongly influenced by Forest (LCT 3). It also borders LCA 5a (Eastern Limestone Hills) and LCA 6b (Forge Valley) in the south. In the north of the LCT there is a gradual transition with LCA 1d (Eastern Moors) and LCA 4b (Whitby-Cloughton Coastal Hinterland). To the east, around Burnistone, Scalby and Newby, it also borders land outside the National Park, which contributes to its approach and setting.

### Summary Description

This is a peaceful, pastoral landscape of deep branching valleys below farmed and forested uplands. The surrounding forests contribute to its enclosed character, and the Corallian Escarpment, marking the northern edge of the limestone, is a prominent skyline feature. Farms and hamlets nestle in valley bottoms and sheltered folds in the landform. The estate village of Hackness is a particularly distinctive settlement, with high stone walls lining the street, and a large estate church. Ribbons of deciduous woodland cover the steepest valley sides, creating lush tunnels of vegetation over roads and paths. The northern part of the LCT is less topographically distinct, and merges more gradually with the adjacent Moorland and Coastal Hinterland LCTs.



Location map for Limestone Dales Landscape Character Type (LCT)

7a = Hackness; 7b = Harwood Dale

## Key Characteristics

- Southern part of LCT dominated by Corallian limestone geology; deltaic sandstones become more dominant towards the north.
- Topography comprises broad U-shaped dales, with steep branching side valleys. The distinctive Corallian limestone escarpment is a feature on the skyline.
- Many springs, streams and flushes, feeding into the River Derwent. Occasional ponds and pools. River Derwent has a meandering course which contrasts with the artificial Sea Cut.
- Land use is predominantly improved pasture; patches of arable, woodland and rough grassland.
- Semi-natural habitats include woodland, streams, hedgerows, verges and rough grassland.
- Trees found in bands of deciduous woodland on steep valley sides, riparian trees, hedgerows, hedgerow trees and copses.
- Field pattern variable. Fields generally more regular and larger on higher land and wide valley floors. Boundaries of hedges, fences and dry stone walls (walls more common on higher land).
- Settlement pattern of isolated farms and dispersed hamlets, constructed of local stone. Estate character around Hackness Hall.
- Network of winding minor lanes and paths.
- Strong influences from surrounding forests. Woodland and landform create sense of enclosure, especially in the south. Long views over Dales from ridges above.
- Very quiet and peaceful, with sense of tranquillity and exceptionally dark night skies.



## Natural landscape features

The dales have been eroded through the Corallian limestone to reveal the underlying deltaic sandstone. The limestone is therefore only visible at the tops of the valley sides, where it forms prominent north-facing slopes – including the Corallian escarpment – which create distinctive skyline features.



Fig.104 Steep valley-side landforms where water has eroded through the limestone (visible on the upper valley sides) to the sandstone below.

The influence of limestone geology is most apparent in the south of the LCT. In the north, close to the transition with the Moorland and Coastal Hinterland LCTs, sandstone becomes more dominant.

One of the most striking topographical features of the LCT is the dendritic pattern of narrow, branching river valleys, which is particularly clear in the south. These form tributaries of the larger valleys, which are broad and U-shaped with steep, wooded, upper sides.

In glacial times, the Hackness area was a lake, blocked from reaching the sea by an ice dam at its eastern end. The lake eventually overtopped at its lowest point and the overflowing meltwater scoured out Forge Valley, finding a route south to the Vale of Pickering. The site of the former lake remained marshy and poorly-drained, so in the early 19<sup>th</sup> Century the ‘Sea Cut’ was created to re-connect the River Derwent to the sea at Scalby. The Sea Cut runs fairly

straight between embankments; very different to the meandering courses of the natural watercourses. The artificial nature of this watercourse means that it is both a natural and cultural landscape feature.

Deciduous woodland, including some ancient woodland, is a feature of the valley sides, where it occupies the steepest land, and also some valley floors. Extensive swathes of ancient woodland have been replanted. Raincliffe Wood is contiguous with Forge Valley Woods and together they form one of the largest native woodlands in Yorkshire. Part of Raincliffe Wood is within Forge Valley Woods National Nature Reserve.

Mature trees - including some veteran trees - in parkland, hedges, fields, and alongside roads add to the wooded character of the landscape. Other semi-natural habitats include streams, riparian habitats, hedgerows, verges, meadows and old quarries. Parts of Raincliffe Wood, and Cockrah Wood, Scar Wood and Hackness Rock Pit are designated SSSI.



Fig.105 Stream (the Lownorth Beck) and Ancient Woodland SSSI at Scar Woods.

Designation	Sites
SSSI	Raincliffe Wood; Cockrah Wood; Scar Wood; Hackness Rock Pit
NNR	Part of Forge Valley Woods

Key designated nature conservation sites

## Cultural landscape features

Land use within the Limestone Dales LCT is mostly improved pasture, but there are also pockets of rough pasture and arable fields. Fields are divided by combinations of walls, hedges and fences. Walls and gorse hedgerows are more common in the northern part of the LCT, where land rises towards the adjacent moorland and coastal hinterland.

The small, dispersed villages of Hackness and Harwood Dale are the largest settlements. Other settlement in the LCT comprises isolated hamlets and farms. They are mostly constructed in stone with pantile or slate roofs and connected by an ancient network of steep and winding lanes. Hackness is an estate village containing several Listed Buildings and structures. It is notable for the high walls which line the village street, and for its spire-capped church of golden stone. Hackness Hall is a Grade 1 Listed Building, surrounded by parkland and a lake. A small part of Scalby Conservation Area is within this LCT, including Low Hall (now miners' Convalescent and holiday home) which is a building of townscape merit.



Fig.106 Hackness Church

Other Listed Buildings in the LCT include houses, farms, bridges and inns. The ruined church of St Margaret, north-west of Harwood Dale, is a Listed Building and Scheduled Monument.



Fig.107 St Margaret's Church, Harwood Dale. Photo credit – English Heritage

Many of the cultural features within the landscape, such as farms, lanes, churches and bridges, are likely to originate in the medieval period. There are also some older features including isolated round barrows.



Fig.108 Traditional farmhouse at Mowthorpe Bridge

Designation	Sites
Scheduled Monuments	Occasional isolated barrows; St Margaret's Church
Listed Buildings	Numerous, including houses, farms, churches, bridges, inns.
Conservation Area	Scalby (part)

Key designated heritage conservation sites



## Perceptual qualities and views

Within the LCT there is a gradual transition from the enclosed, small-scale landscapes in the south to a broader, more open and larger scale feel in the north. The south has a closer visual and topographical relationship to the Limestone Hills LCT, whereas in the north there is a stronger influence from the adjacent Moorland and Coastal Hinterland.



Fig.109 The northern part of the LCT has a more open character and a gradual transition to the adjacent elevated moorland

The LCT does not contain main roads or through routes, and consequently feels very quiet and isolated. There is little modern development and much of the LCT has a 'changeless' character. This can be appreciated from the network of lanes and Public Rights of Way. The Tabular Hills Walk follows the southern part of the Derwent Valley and the Sea Cut. The sense of tranquillity is enhanced by the dark night skies; much of the LCT is within the Dark Skies Core Area, and most of the remainder is within the Buffer Zone.

Trees and woodland make an important contribution to perceptual qualities and views of the LCT. The surrounding forests are a constant presence, and the deciduous woodland which lines many of the valley sides adds to the sense of enclosure, as well as the seasonal variety of colours and textures. The

woodlands on the valley sides contrast with the more open farmland of the valley floors and the plateau above. Entering woodland whilst on a steep lane can feel like plunging into darkness, especially where the trees form a 'tunnel' across the road.

Woodland within the LCT is identified by the National Park Authority as remote land, and a small area in the north of the LCT is a Remote Area under planning policy ENV3.

The Corallian escarpment, marking the northern edge of the limestone, is a distinctive feature overlooking the dales.



Fig.110 The Corallian escarpment is a skyline feature in many views from within the dales.

There are panoramic views into and across the dales from gaps in the trees along the escarpment. These include several viewpoints identified on the OS map. The Limestone Dales LCT is intervisible with land outside the National Park boundary around Burnistone, Scalby and Newby.



Fig.111 Elevated view from Swang Road across the LCT, with Scarborough visible in the distance.

## Ecosystem Services provided by the Limestone Dales LCT

Type of Ecosystem Service	Existing Contributions	Opportunities
Cultural Services	<p>The network of lanes and Public Rights of Way provide opportunities for quiet recreation and exercise in attractive scenery in a relatively quiet corner of the National Park, with high levels of tranquillity and dark night skies. There is easy access from the adjacent settlements of Scalby and Newby.</p> <p>The historic buildings contribute to the LCT's sense of history, which is particularly strong around the estate village of Hackness.</p>	<p>There may be further opportunities to develop walking / cycling routes from local centres which could be used by local people and visitors. There may also be opportunities to increase the number of historic buildings and sites open to the public.</p>
Provisioning Services	<p>Farmland supports pastoral and some arable agriculture, providing food, and fibre in the form of wool. Woodland and trees provide timber, wood fibre and biomass. Springs and streams provide fresh water.</p>	<p>Woodland management creates opportunities for production of wood products and enhancement of biodiversity. There may be opportunities to improve the biodiversity of farmland, and to reduce runoff and pollution.</p>
Regulating Services	<p>Woodland helps with carbon sequestration and improves air quality by absorbing pollutants. Soils and valley-side vegetation absorb rainwater and slow water flow, helping to regulate downstream flooding. Trees and flowers provide habitats for pollinating insects.</p>	<p>Tree planting/colonisation schemes have potential to increase carbon storage and reduce pollution. Trees and hedgerows can also contribute to Natural Flood Management (NFM) schemes.</p>
Supporting Services	<p>The LCT provides habitats and habitat links for a range of species, particularly along river valleys, along valley side woodlands, and through hedgerow networks. It also contributes to soil formation, photosynthesis and the water cycle.</p>	<p>Carefully-designed tree and hedgerow planting, increased woodland cover, and good management of field edges, can enhance habitat links.</p>

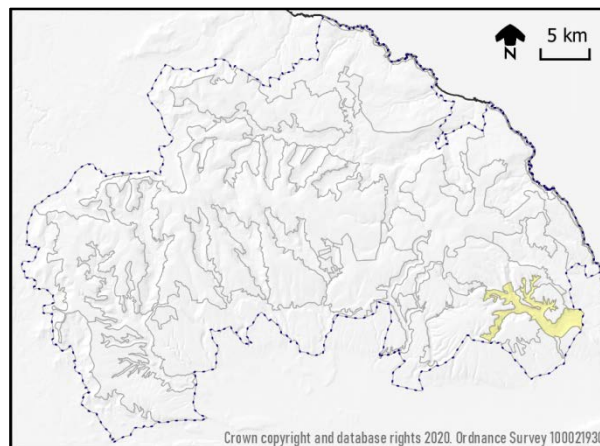
## Landscape Character Area Descriptions

There are three distinctive Landscape Character Areas (LCAs) within the Limestone Dales LCT. These are described on the following pages.

## Landscape Character Area 7a: Hackness



Fig.112 A typical scene in LCA 7a, near Mowthorpe Bridge, showing the Sea Cut on the right, and the wooded Corallian escarpment forming the horizon.



Map showing the location of LCA 7a within the National Park

This LCA forms the southern part of the LCT, and comprises the steep-sided, relatively broad U-shaped valley of the River Derwent, as well as its 3 major tributary valleys which are steep and branching. The valley is at its broadest in the south around Mowthorpe Bridge, as this was a lake in glacial times, dammed by ice and rock. Drainage directly to the sea was re-established in the early 19<sup>th</sup> Century by construction of the Sea Cut. Its bunds form an engineered feature in the landscape. The former lake bed supports arable crops, whereas improved pasture is the dominant land use over much of the LCA.

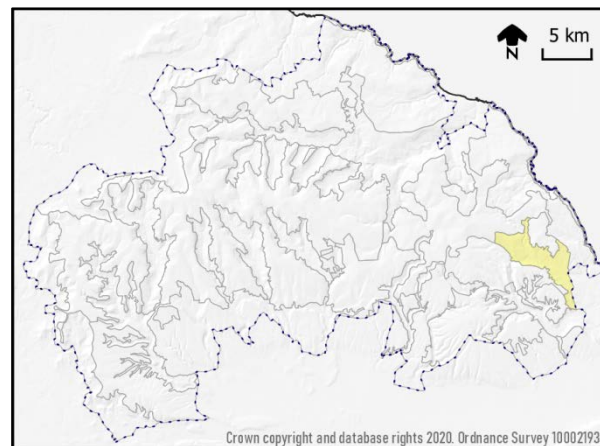
Hackness is the estate village of Hackness Hall. It contains estate cottages (with elaborate barge boards), church, village hall and a school. Behind a sandstone wall which runs along the road is a walled garden with an orangery. In the bottom of the valley is a lake surrounded by parkland and woodland. The village's setting is dominated by steep woodland which has a ground flora of wild garlic in spring. The LCA is generally well-treed, with valley-side woodlands, riparian trees, hedgerow trees and small copses.

The LCA is relatively well enclosed by the surrounding landform and vegetation (including Dalby and Wykeham Forests, and Raincliffe Wood). There are views in to the LCA from surrounding high land, and from the edges of Scalby and Newby.

## Landscape Character Area 7b: Harwood Dale



Fig.113 A typical scene in LCA 7b, south of Harwood Dale, looking up the valley of the Lownorth Beck towards Langdale Forest and Fylingdales Moor.



Map showing the location of LCA 7b within the National Park

This LCA forms the northern part of the LCT, and comprises the upper reaches of the River Derwent (also known by local names of Harwood Dale, Lownorth Beck and Jugger Howe Beck) and its tributaries.

The Harwood Dale LCA is more influenced by sandstone geology, although the Corallian limestone escarpment is still visible on the southern skyline. Its elevation, and smoother topography, means that this LCA has a more open feel. There are long views along the Dales, and also across to the adjacent forests and moorland. Fields are generally medium to large in size, and regular in shape. The varied field boundaries, comprising hedges (including some gorse hedges), dry stone walls and fences also give it a slightly more upland character. Harwood Dale does not have the estate influences of Hackness, with almost all settlement comprising large isolated farms. A group of farms form the dispersed hamlet of Harwood Dale. Much of the land is improved pasture, but there are some arable fields, and also some rough pasture (the latter is close to the edges of forest and moorland and enhances the upland feel in these places).

Scar Wood is an SSSI and comprises ancient coppice woodland on either side of the Lownorth Beck. The ground flora is diverse, including carpets of bluebells in spring. Open flushes on the western side of the stream support a range of plant species including orchids.

St Margaret's Church was built in 1634, at a time of rapid change within the Church of England. This is a relatively rare example of a rural Anglican parish church from this time. It was built by Sir Posthumus Hoby in memory of his wife Margaret, who had died the previous year. It was located close to Dale Hall (the site now occupied by Chapel Farm). St Margaret's Church was abandoned in 1862 when a new church was constructed nearby, and the building is now a ruin. It is set with a churchyard (also part of the Scheduled Monument designation).



## Forces for Change acting on the Limestone Dales LCT

Issue/ Force for Change	Landscape sensitivities and potential impacts	LCAs affected
Abandonment of traditional agricultural buildings, and demand for new buildings	Changing farming practices require larger and more modern farm buildings. Old buildings no longer serving their original purpose may become derelict unless an alternative use can be found (e.g. conversion to holiday accommodation). This may lead to a loss of their historical integrity, or to the features and fittings associated with their original use. New larger agricultural buildings are likely to be much more prominent in the landscape and may also contribute to light pollution unless carefully designed. Stone walls may fall into disrepair and hedgerows become gappy if they are no longer required to be stockproof. They may be replaced with post-and-wire fencing. There has been some localised field boundary loss within the LCT.	All
Tree disease and invasive species	Ash Dieback is apparent within this LCT, and is likely to increase in the coming years, although some ash trees remain unaffected. It is likely to affect ash trees in woods, and roadside and hedgerow ash trees. Other tree diseases and invasive species are also threats to both the appearance of the landscape and the functioning of ecosystems.	All
Biodiversity loss	20 <sup>th</sup> Century intensification of farming has resulted in biodiversity loss, particularly through the loss of flower-rich grassland due to switching from hay to silage, or to arable crops. This has led to a reduction in the variety and quantity of herbs and grasses, leading to declining numbers of insects, birds and other wildlife. In addition, swathes of valley-side ancient woodland in the LCT were replanted as plantation. This has led to a loss of ground flora and woodland habitats, and the species which they support.	All
Climate change	Increased temperatures and prolonged dry spells will affect the tree species which can survive, affecting woodland composition. Trees are also potentially vulnerable to increased intensity and frequency of storms, and increased rainfall risks damage to vegetation and increased flood risk to buildings. A longer growing season, and changing environmental conditions, may affect farming practices and choice of crops. Longer periods of lower rainfall will affect water levels in rivers and make farmland soils more prone to drought.	All
Additional tree cover	There are many opportunities to increase tree cover within this LCT. This could include extending and linking existing woodlands, new woodland planting, woodpasture, hedgerow trees, riparian trees, roadside trees, infield trees and parkland trees. There may also be opportunities for allowing natural colonisation (particularly on the moorland fringes found in higher parts of LCA 7b).  When thinking about increasing tree cover, it is important to consider any potential impacts on existing habitats, such as flower-rich grassland. Such sites may not be designated or recorded. It could also impact on buried archaeology, or on the settings of Listed Buildings or Scheduled Monuments. In the narrower dales, large-scale tree planting on the valley floor could also affect the current visual	All

Issue/ Force for Change	Landscape sensitivities and potential impacts	LCAs affected
	composition of the landscape, where valley floors tend to be more open, and valley sides more wooded.	
Loss of rural character	Lanes currently have a strongly rural character with few urbanising influences. Additional signage and other 'clutter' risks eroding this rural character. Suburban style property boundaries, such as tarmac driveways, concrete kerbs, ornamental planting and close-boarded fences also dilute the rural character, particularly in the vicinity of settlements on the south east periphery.	7a
Farming and land management	The consequences of past changes in farming practices are described in 'biodiversity loss' above. In addition the artificial fertilisation of fields, and the farming of livestock, may result in nitrate enrichment and the pollution of water supplies unless carefully managed. Forthcoming changes to agricultural grant schemes are likely to result in changes to how land is managed, with payments for 'public goods' such as climate change mitigation measures and supporting nature recovery. This is a change in emphasis to the subsidy system which will hopefully be a positive force for change in the landscape.	All
Loss of tranquillity and dark skies	Dark skies are threatened by light pollution from traffic, lightspill from agricultural buildings, and street lighting. The street-lit areas are on the National Park boundary, and outside the Dark Skies Buffer Area. Tranquillity is currently very high within the LCT, but would be affected by increases in traffic, noise, people and development.	All
Infrastructure and communications	There are currently few intrusive built features in this LCT, so the introduction of features such as mobile phone masts would be particularly noticeable.	All
Changes outside the National Park and in adjacent LCTs	There is intervisibility with agricultural land along the eastern boundary of the National Park, as well as with the edges of the settlements of Scalby and Newby which are adjacent to the National Park Boundary. Therefore developments within these areas are likely to affect views from the National Park. The Limestone Hills LCT also has strong visual connections with the more elevated LCTs which surround it (LCT 1 – Moorland, LCT 3- Forest, LCT 4 – Coastal Hinterland, and LCT 5 – Limestone Hills). Changes in these LCTs, for example changes in land management or the introduction of built development, may therefore impact on the Limestone Dales LCT.	All

## Landscape Guidelines for the Limestone Dales LCT

### Protect

- Protect the distinctive skylines above the dales (these are often – but not always – in adjacent LCTs). Avoid siting vertical structures in prominent locations.
- Protect the quiet and undeveloped character of the LCT.
- Protect dark night skies, particularly in the Dark Sky Core and Buffer Areas.

- Protect the relationship between farms and the surrounding landscape. Where new buildings are required, maintain this relationship through careful siting, design and mitigation (see National Park Design Guide).
- Protect historic buildings, and the distinctive estate character around Hackness Hall. Ensure that conversion of redundant farm buildings is sensitive to their former use and location.
- Protect the setting of the National Park, particularly from highly intrusive or cumulative development.

## Manage

- Encourage active management of broadleaved woodland where it will provide clear landscape and biodiversity benefits alongside production of wood products where appropriate. Seek opportunities to restore Plantations on Ancient Woodland Sites to native woodland.
- Manage field boundaries, maintaining their diversity – for example gorse hedges and stone walls in higher areas. Aim to replant hedgerows which have been lost or become gappy, and consider opportunities to combine this with Natural Flood Management.
- Seek opportunities to extend and link habitats (for example field margins, verges and hedgerows) and to reinstate flower-rich grasslands of different types.
- Manage roadside and hedgerow trees, allowing new trees to grow out as standards.
- Plant new parkland trees to become the mature parkland trees of the future.
- Manage SSSIs and Scheduled Monuments in accordance with Management Plans.
- Consider opportunities for dynamic boundaries between farmland, scrub and moorland where this LCT adjoins LCT 1 (Moorland).

## Plan

- Consider opportunities for increasing tree cover, for example through new native woodland planting, particularly where it can extend or link existing woodland. This should follow the landform (e.g. parallel to slopes along valley sides) and avoid straight edges. There may be opportunities to create woodpasture, promote wet woodland on valley floors, and allow natural colonisation on moorland fringes. There will also be opportunities to plant new hedgerows and promote hedgerow and parkland trees. Before commencing any tree planting, professional advice should be sought to ensure that there will be no negative effects on the historic environment, ecology or access.
- Promote Natural Flood Management Schemes where appropriate.
- Ensure development proposals within the National Park's setting are appropriately assessed, and adequate mitigation is in place, particularly where there may be cumulative impacts.
- Where communications masts or other vertical features are unavoidable, site them close to existing trees or buildings, and consider non-standard designs to minimise visual impact.
- Retain the rural character of lanes, avoiding unnecessary signage and urbanising features such as concrete kerbs, tarmac pavements/ driveways and close-boarded fencing, particularly where the LCT abuts settlements close to or outside the National Park boundary.
- Seek opportunities to underground overhead wires and poles where possible.



- Ensure that change to heritage assets is informed by an understanding of their importance, and can retain and where possible enhance their significance. Provision should be made for management plans, and research into materials, where appropriate.