LCA 10 Yoredale Uplands

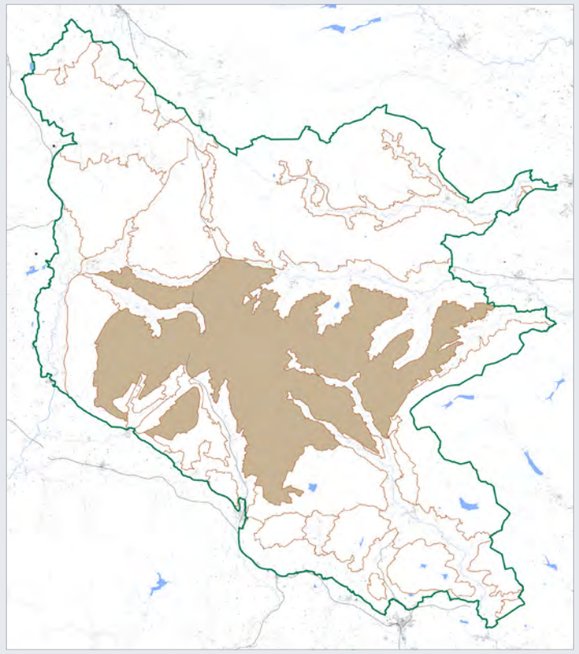
Yorkshire Dales National Park - Landscape Character Assessment

YORKSHIRE DALES
National Park Authority

LCA 10 Yoredale Uplands

Key characteristics

- Elevated stepped hills formed by differential erosion of layered Yoredale Series limestones and sandstones, often with pronounced flat plateau tops, sub-divided by and overlooking the central dales.
- Exposed peak sides are marked by sandstone and limestone crags and screes, sometimes forming dramatic, steep-sided, upstanding plateau peaks (eg Pen-y-ghent and Ingleborough Hill).
- Deep drift deposits often mask underlying geology but are cut through by gullies on steeper hillsides to reveal stepped rock bands which often form waterfalls.
- Isolated pockets of limestone karst scenery are exposed within the surrounding drift and along valley sides, creating areas of brighter grassland and typical limestone features including pavements, cliffs, screes and extensive underground cave systems.
- Broadleaved tree cover is confined to scattered trees clinging to cliffs and rock outcrops in gullies or on hillsides, or occasional small woodlands. At lower elevations tree cover increases in gills and along dale heads.
- Extensive coniferous plantations form dark, alien intrusions across the centre of the area.
- Moor tops are uninhabited. Occasional upland farms of traditional construction with some modern buildings are found on the dale fringes and at dale heads, usually close to rivers and roads and often associated with isolated pockets of limestone grassland.
- Drystone walls extend from the dale fringes to enclose rough pasture and sometimes sub-divide wider areas of moorland. Stone types are mixed, often changing in accordance with outcropping geology. Occasional isolated walled meadows associated with upland farms and field barns are found in limestone pockets.
- Roads and footpaths are isolated in character with panoramic views of the central dales and Three Peaks.



Numbered photographs illustrate specific key natural, cultural and perceptual features in the Yoredale Uplands LCA (see page 7)



Gullies on slopes of Plover Hill

1

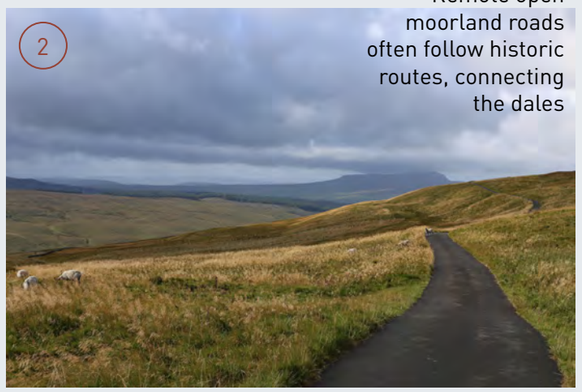
Panoramic views across bleak fells in which distinctive gritstone capped summits stand out as landmarks



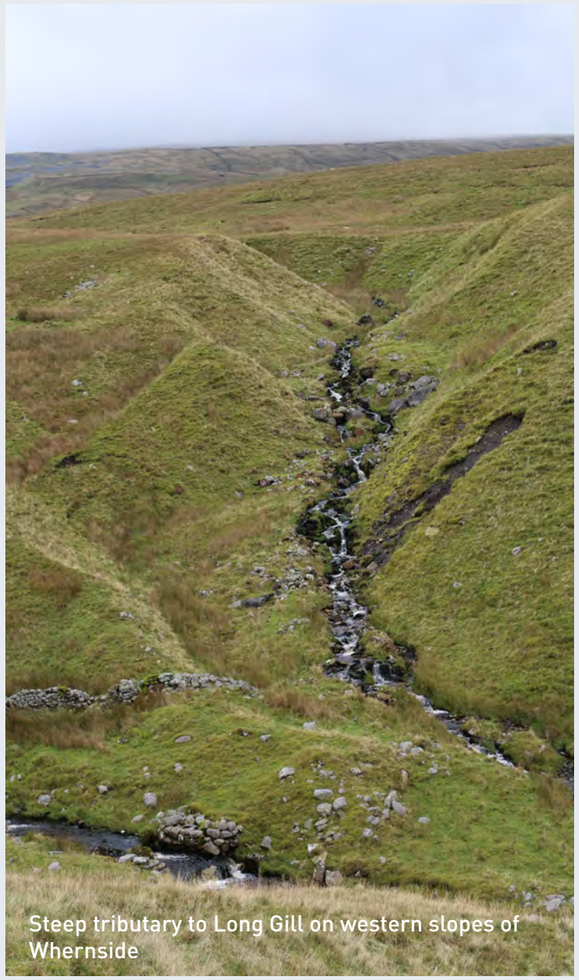
From Cam High Road, looking across Cam Fell towards the summit of Ingleborough

2

Remote open moorland roads often follow historic routes, connecting the dales

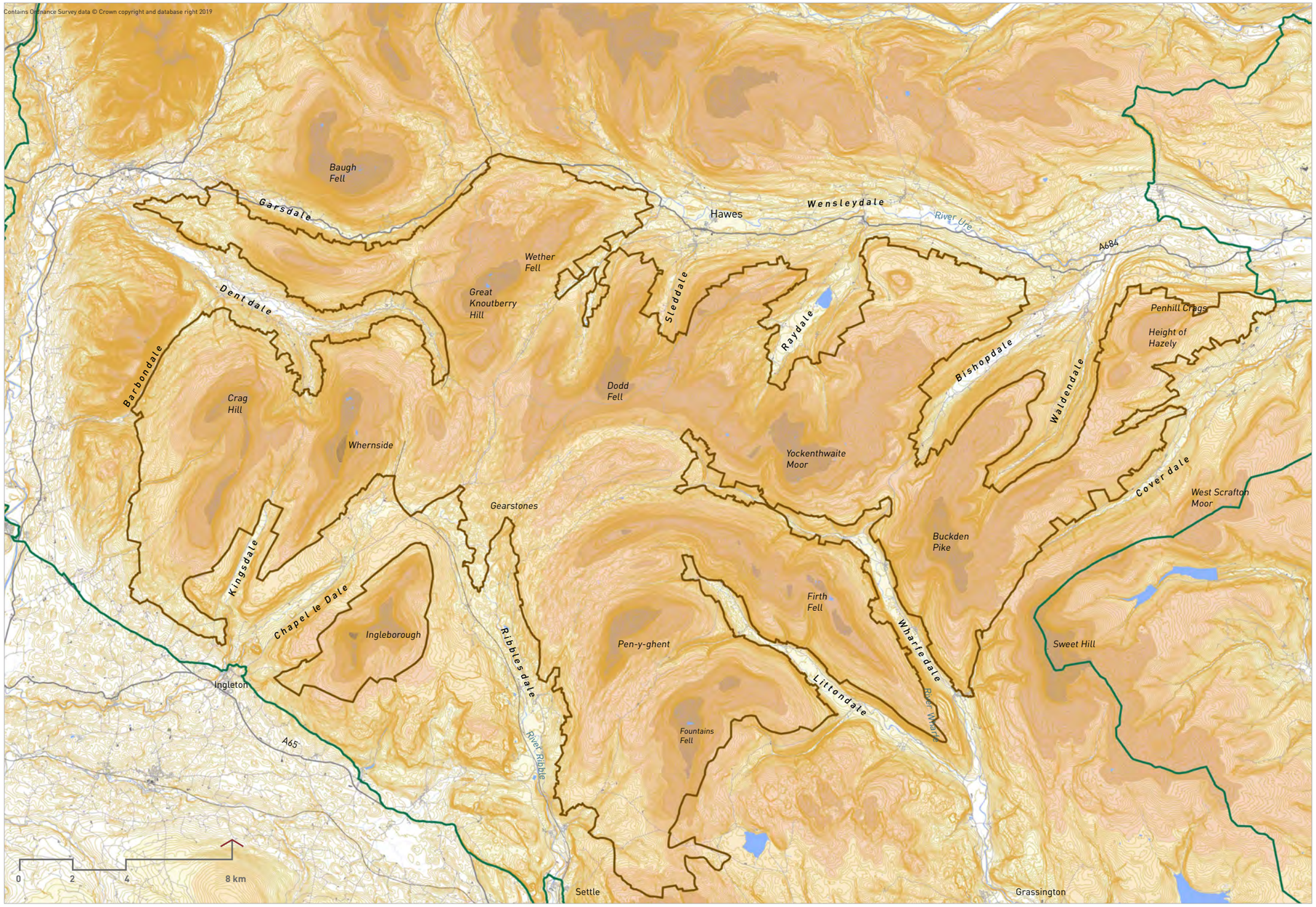


Cam High Road - a former Roman Road and medieval highway between Ingleton and Hawes



Steep tributary to Long Gill on western slopes of Whernside

Landscape context: Yoredale Uplands



Landscape context

The Yoredale Uplands LCA comprises the central moors and fells of the Yorkshire Dales, which are underlain by rocks of the Yoredale Series, a cyclic sequence of limestones, shales and sandstones lying over 300m deep above the Great Scar Limestone. Alternating bands of soft shale with harder sandstones and limestones have created a distinctive 'stepped' landscape along valley sides, with harder wearing beds standing out as scars within scree slopes or creating waterfalls such as at Force Gill on Whernside.

The differential erosion of hard and soft rocks has produced a dramatic landscape of peaks and valleys. Remaining outcrops of erosion-resistant Millstone Grit cap peaks within the area, forming the high fells including, most famously, the Three Peaks of Whernside (736m AOD), Ingleborough (723m AOD) and Pen-y-ghent (694m AOD). Within the Three Peaks area the rocks lie almost level, creating a simple, distinctive stepped character. To the east, a larger outcrop of Millstone Grit forms Buckden Pike (702m AOD) between Wharfedale and Bishopdale.

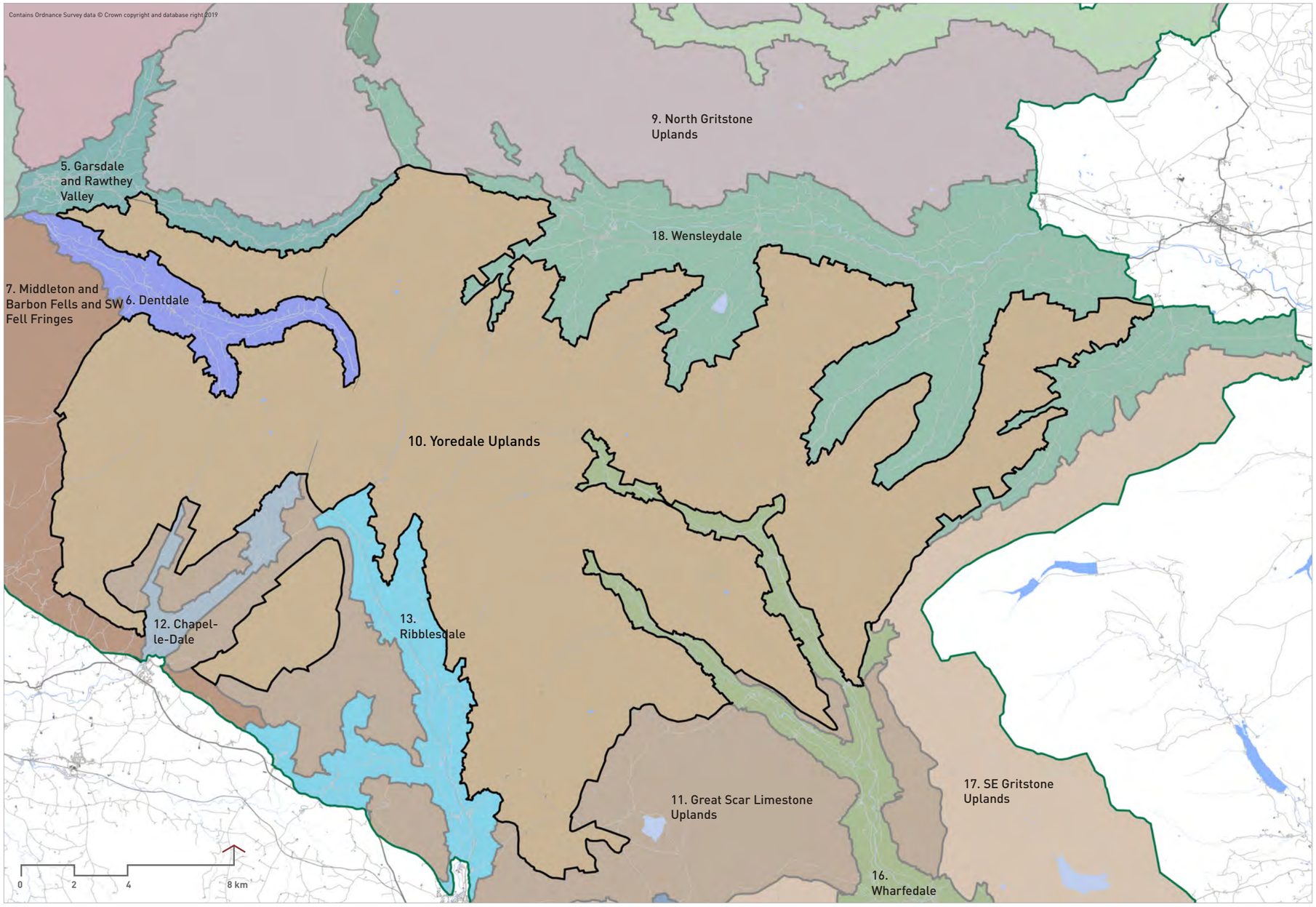
Where the Yoredale Series rocks have been eroded away the Great Scar Limestone becomes exposed, eroding further to form the dales valleys, which penetrate deeply into the area from Wharfedale in the east, Ribblesdale, Kingsdale and Dentdale in the south and west and Wensleydale in the north.

Near Gearstones, at the head of Ribblesdale, glacial action has created a notable drumlin field, with many egg-shaped, rounded green hills.

Post Ice Age landslips created impressive crags, as seen at Black Scar and Penhill Crags at Penhill in Wensleydale, where rocky ramparts dominate a mass of tumbled blocks. Exposed shales contain bands of flaggy sandstones, once worked by quarrying and tunnelling for roofing flags. The stepped landscape of the Yoredale rocks is clearly seen at Penhill with banded outcrops of dark and light grey limestone, capped by a darker mass of sandstone and shales.

The shale of the Yoredale Series occasionally contains thin, brittle seams of coal, as found on the summit of Fountains Fell, which had a colliery for many years.

Landscape character: Yoredale Uplands



Landscape character

An area of broad, often flat-topped and stepped peaks rising up to 736m AOD which separate the central dales between the western edge of the Park, Wensleydale in the north, Coverdale to Wharfedale in the east and to Ingleborough Common and Malham Moor in the south. Ingleborough Hill forms an outlier of the area contained within the Limestone Moors.

Banded outcrops of dark and light grey sandstone, capped by darker sandstones and shales



Ingleborough from Chapel-le-Dale

Remnants of the stone rampart that encloses the summit and the circular stone buildings within



Ingleborough hillfort with Pen y ghent in background

Distinctive landscape character

Yoredale Series geology, with its alternating bands of limestone, sandstones and gritstone is exposed in cliffs and scars throughout the area, although these are less frequent than in the Great Scar Limestone Uplands (LCA 11) to the south, where drift deposits are either shallower or absent. Underlying geology is often pronounced as a series of broad, slightly rounded, terraced flanks to hillsides, as seen at the head of Bishopdale at its junction with Wharfedale but also forms spectacular upstanding, stepped, rocky plateaux at Ingleborough Hill and Pen-y-ghent.

Exposed rocky steps are softened and connected by concave slopes of softer drift geology, which often reinforces the stepped nature of Yoredale Series landforms. Glacial retreat has formed a drumlin field between Pen-y-ghent and Whernside, across the head of the Ribblesdale.

Rocky outcrops and screes vary between sandstones, gritstones with their darker colours and blocky texture, to limestones with lighter grey or white colours and smoother texture. Localised, isolated pockets of limestone scenery occur (eg New Pasture and Dawsons Close, east of Pen-y-ghent), with limestone pavements, screes, shakeholes and caves demonstrating typical karst characteristics. Limestone scenery is sometimes juxtaposed with the dark layers of partially eroded beds of blanket peat on the gentle lower slopes of hills.

Deep gills are often found on the lower slopes of hills, cutting back and uphill through the softer drift geology, sometimes to harder bands of rock, exposing gritstone and limestone steps at gill heads and intermediate positions downslope. Rock steps are normally accompanied by waterfalls, pools and limited tree cover, which establishes more easily on the firm rock than the often eroding, unstable drift geology of intervening gill sides.

The frequency and form of gills varies considerably through the area, from numerous v-shaped shallow cuts (eg on the slopes of Whernside and Ingleborough Hill) to infrequent deep v-cuts with steps and waterfalls (at the head of Coverdale) and shallow gills with deep cuts though rock bands and stepped beds where drift geology forms a thinner cover and rock platforms are nearer the surface (at the junction of Bishopdale and Wharfedale).

At the base of hills and in elevated valleys shallow rocky streams occur, with steeply-eroded or shallow grassy

Numbered photographs illustrate specific key natural, cultural and perceptual features in the Yoredale Uplands LCA (see page 7)

Dramatic landmark summits, with flat or tilted platform tops surrounded by sheer vertical cliffs



Pen y ghent from Silverdale Road to the east

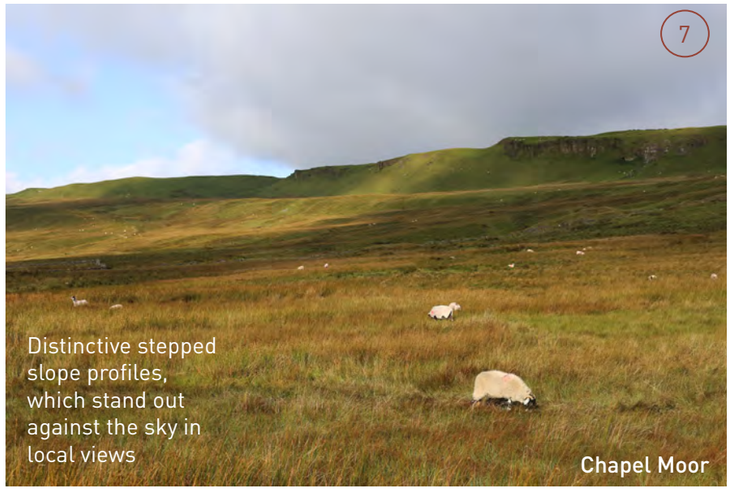


Ingleborough in distance - Kidhow Gate, Cam High Roa



Blea Moor

A vast, wild and lonely landscape, on a huge scale



Distinctive stepped slope profiles, which stand out against the sky in local views

Chapel Moor



Buckden Outmoor and Buckden Pike from Park Lane near Bishopdale head

Numbered photographs illustrate specific key natural, cultural and perceptual features in the Yoredale Uplands LCA (see page 7)

and rushy banks and occasional rush-filled hollows on flatter areas. Approaching the more sheltered dale heads, streams remain shallow and rocky but widen out and are accompanied by increasing tree cover, close-grazed grass and broad bands of marginal or damp-loving herbs such as meadowsweet.

Landcover is primarily acid grassland mosaic, giving way to increasing rush and cotton grass cover in wetter peat covered places (for example on hill top plateaux or on the shallow areas at the foot of hills). Areas of walled in-bye rough pasture, used for sheep and cattle grazing, are found near the dale edges with sheep grazing on the open moor tops beyond. Pockets of walled limestone meadow and pasture have been established on the shallow, loamy, better-drained soils associated with occasional areas of limestone scenery.

Within the main body of the central moors upland heath is relatively scarce, being limited to pockets on the eastern slopes of Pen-y-ghent and Potts Moor and Old Cote Moor further east, above Littondale. At the eastern edge of the area, however, between Bishopdale and the Eastern Moors, extensive upland heath is found on the peat-covered shallow tops of Naughtberry Hill, Carlton Moor, Melmerby Moor and Penhill, lending this area a similar character to the adjacent Eastern Moors.

Tree cover is absent from the open moors. At lower elevations occasional ash and sycamore are found in sheltered gills, scattered along streams at lower elevations or in groups around farms. Small broadleaved woodlands, primarily of ash or sycamore with occasional hawthorn scrub, are sometimes found on steep, better-drained land or outcropping areas of limestone at the dale fringes, for example at the head of Bishopdale.

Extensive areas of conifer planting have been established across the centre of the area, between Langstrothdale Chase and Baugh Fell. The dark, enclosing, rectilinear forms of these plantings are at odds with the open, mosaic-like character of the surrounding moors. There are smaller conifer stands on the northern tip of Naughtberry Hill and at the head of Coverdale.

Roads through the area are those which interconnect the dales and are generally of historic origin (for example Galloway Gate, a former cattle drove route, between Dentdale and Garsdale, or the B6255 between Ribblesdale and Widdale, a former turnpike road). Whether crossing the open moor tops or within elevated valleys these roads are isolated and little used, with no road markings.

Enclosure by drystone walls with wide grassy, wildflower verges at lower elevations often gives way to open roads with cattle grids on the moor tops. Some moorland stretches have been enclosed by post and wire fencing.

Occasional stream crossings are defined by short drystone wall or timber fence parapets rather than obvious bridges. An extensive right of way network crosses the open moors and peaks, often following historic routes.

Panoramic views into and over the dales, between the Three Peaks and over the wider landscape to the west and north west are a key feature.

Settlement does not occur on the open moor tops and is very sparse in remaining areas, comprising upland farms, linked to roads and mostly found near the heads of dales. The more remote farms are usually located within pockets of limestone scenery, taking advantage of the grazing qualities of limestone grassland. Occasionally cottages or farmhouses have been abandoned. Farmhouses are mostly of traditional stone rubble construction (using both limestone and sandstone depending on local outcropping geology) or are rendered, with slate or stone roofs. Outbuildings are a mixture of traditional stone buildings and modern buildings constructed from timber, corrugated plastic and asbestos sheeting or metal silos, clustered around the farmhouse. Most farms retain a traditional character despite the presence of modern outbuildings, overhead power lines and agricultural machinery.

Evidence of previous use of the landscape is seen in occasional roadside limekilns or small quarries and mineral workings (eg shallow shaft coal pits near Galloway Gate, or lead working on the moor tops). The latter are generally sparse and the tips are now so well vegetated or remote that they are hard to distinguish from the surrounding moorland.

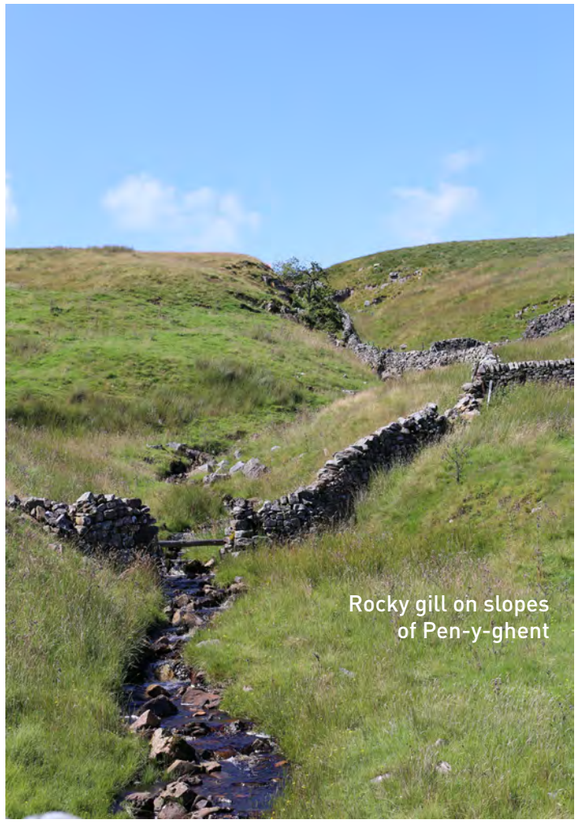
Drystone walls extend along roads and up from the dale edges, enclosing 'in bye' rough pasture and improved pasture and meadow or are found in isolated pockets where patches of limestone grassland have been enclosed. Walled meadows are mostly accompanied by traditional field barns. Wall construction is from locally gathered or quarried rock, often directly reflecting outcropping limestone, sandstone or gritstone geology and creating a distinct change in wall colour as geological boundaries are crossed. Walls are often constructed directly over outcropping features such as limestone pavements or rocky ledges and serve to accentuate the stepped or concave topography of the area.

Isolated circular or square drystone sheepfolds are also local landscape features.



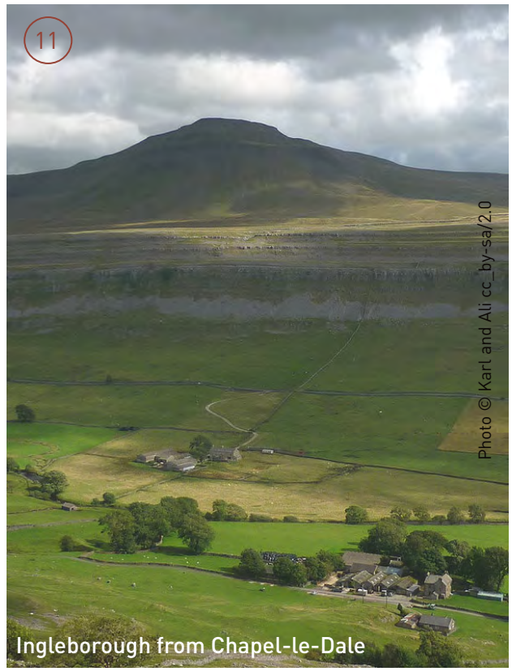
Rolling stepped slopes of Buckden Pike, looking towards the dale head of Wharfedale

The sky changes constantly, throwing shadows to expose the cragged and stepped skylines, often against racing clouds



Rocky gill on slopes of Pen-y-ghent













Key natural, cultural and perceptual features

NATURAL

Distinctive stepped slope profiles, which stand out against the skyline in local views, caused by the differential erosion of alternating bands of hard sandstones and limestones and softer shales. (3) (7)

Dramatic landmark summits, with flat or tilted platform tops surrounded by sheer vertical cliffs. The most famous examples are Ingleborough and Pen-y-ghent Fell. (3) (5) (11)

Banded outcrops of dark and light grey sandstone, capped by a darker layer of sandstones and shales. (3)

Drumlin field near Gearstones at the head of Ribblesdale, where post glacial erosion has moulded glacial till into a 'swarm' of rounded, egg-shaped hills. (12)

Impressive crags eg at Penhill Crags and Black Scar

Extensive underground cave systems; slopes are peppered with shake holes and swallow holes

Rocky waterfalls which reveal and step down across the banded rock strata of the Yoredale series.

Exceptionally valuable upland habitats - The massifs of Leck Fell, Whernside, Ingleborough, Pen-y-ghent, the upland wetlands of Low Gill Moor (west of Addlebrough) and parts of the moorland slopes to Littondale and Upper Wharfedale are designated as SSSI for their diverse range of habitats, which reflect the calcareous and acidic soils derived from the varied underlying bedrock. Ingleborough is also part of the Ingleborough Complex SAC and of international importance for its calcareous flora. (13) (15)

CULTURAL

The highest Iron Age Fort in England on the plateau summit of Ingleborough, which is almost entirely enclosed by a stone built rampart. (4)

Remote open moorland roads following historic routes (typically drove roads or toll roads) that connect the dales. (2)

Sequence of historic structures along the Settle-Carlisle Railway, including the spectacular Ribblehead Viaducts and smaller viaducts at Dent Head and Aisgill. These powerful, evocative structures stand out against their open moorland setting. To the east of the Ribblehead Viaduct, the former railway construction camp is a scheduled monument. (14)

Isolated traditional farmsteads and stone field barns which have often been abandoned

Historic lime kilns and former mine shafts and/or tips indicating the sites of former mineral workings

Bronze Age round cairns, often sited where there are spectacular views, eg on the slopes of Wether Fell and Addlebrough overlooking Wensleydale

PERCEPTUAL

A vast, wild and lonely upland landscape on a huge scale. Occasional isolated human scale features, such as farmsteads, railway structures, moorland roads and sheepfolds seem tiny in the context of the open and empty, sweeping Yoredale Uplands. (6) (8) (9)

Panoramic views across bleak fells in which the distinctive stepped and plateau summits of peaks such as Ingleborough, Addlebrough and Pen-y-ghent and ridges such as Whernside, Crag Hill and Firth Fell stand out as landmarks. (1) (10)

Exposure to the elements - this is a natural, brutal and often inhospitable landscape where there are opportunities to experience weather systems at full force - the sky changes constantly, throwing shadows to expose the cragged and stepped skylines, often against racing clouds. (9)

The Yorkshire Three Peaks Challenge - a popular route, accompanied by a time limit; the challenge is to complete a circuit of the peaks of Pen-y-ghent, Whernside and Ingleborough in under 12 hours.

Photos that illustrate specific key natural, cultural and perceptual features are numbered eg. (10)

Yorkshire Dales National Park - Natural Beauty and Wildlife Special Qualities: Yoredale Uplands

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SEDBERGH
Clough Force
Garsdale
Aye Gill Pike
Dentdale
Barbondale
Flinter Gill
Arten Gill Falls
Great Knoutberry Hill
Crag Hill
Barbon Beck
Gragareth
Whernside
Force Gill
Chapel le Dale
Thornton Force
Pecca Falls
Swilla Glen
Snow Falls
White Scar Caves
Ingleborough
Stepped slope profiles and dramatic flat topped summit
INGLETON
Ingleborough Cave
Internationally important limestone features and habitats - Ingleborough Complex SAC -
Hardraw Force
Whitfield Gill Force
Mill Gill Force
BAINBRIDGE
HAWES
Wensleydale
Aysgarth Falls
Addlebrough
Semer Water
West Burton Waterfalls
Height of Hazely
Langstrothdale
Gray and Crook Gill Waterfalls
Hubberholme Wood
Buckden Pike
Stepped slope profiles and dramatic flat topped summit
Hull Pot
Pen-y-ghent
Ribblesdale
Churn Milk Hole
Pen y Ghent SSSI - limestone, acidic grassland and bog habitats
Yew Cogar Cave
Littondale
Wharfedale
Catrigg Force
Jubilee Cave
Victoria Cave
Attermire Cave
Malham Tarn
Internationally important limestone features and habitats - Craven Limestone Complex SAC and Malham-Arncliffe SSSI -

0 2 4 8 km

The Special Qualities of the Yorkshire Dales National Park are described in the National Park's Management Plan 2019-24. This map shows selected special qualities (for which spatial data is available) that are found within the Yoredale Uplands LCA.

This special qualities mapping is shown within the area that forms the backdrop to local views; it reflects the extent of visibility and the overall landscape setting for the Yoredale Uplands LCA

Special Qualities of the YDNP

- YDNP Boundary
- Yoredale Uplands LCA boundary
- Extent of area that forms the backdrop to views from the Yoredale Uplands LCA

Natural beauty

- **Dales with distinctive stepped profiles**
  [Displaying outcrops of rocks from the Yoredale series]
- **Fells that rise to over 700m**
  [Including the Millstone Grit capped 'Three Peaks']
- **Outstanding classic limestone scenery**
  [Underlain by Great Scar Limestone & displaying distinctive karst character]
- **Extraordinary cave systems**
  ['Caves' noted as 'recognised attraction' in YDNPA Visitor Strategy]
- **The Howgills**
  [Areas in the YDNP underlain by Silurian rocks]
- **Significant glacial/post-glacial features**
  [Prominent drumlins and glacial drift landforms]
- **Spectacular waterfalls**
  ['Water features' noted as 'recognised attraction' in YDNPA Visitor Strategy]

Wildlife*

- **Flower-rich hay meadows and pastures**
  [Lowland meadows; Upland hay meadows]
- **A range of rare limestone habitats**
  [Limestone pavements; Lowland calcareous grassland; Upland calcareous grassland]
- **Extensive areas of moorland**
  [Upland heathland; Blanket bog; Lowland raised bog]
- **Small areas of broadleaf woodland**
  [Deciduous woodland; ancient woodland (darker tone)]

*Priority Habitats [S41 NERC Act 2010]

Yorkshire Dales National Park - Cultural Heritage Special Qualities: Yoredale Uplands

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SEDBERGH
Garsdale
Dandrymire Viaduct
Mine workings on Garsdale Common - coal pits
HAWES
BAINBRIDGE
Wensleydale
Iron Age settlement site near Addlebrough
Settle to Carlisle Railway
Dentdale
Barbondale
Former coal mining
Cam High Road
Historic route between Ingleton and Bainbridge
Dent Head Viaduct
Thoralby Lead Mines
Blea Moor Tunnel
Former peat cutting
Great Aygill Bell Pits
Wildgath Lead Mine
Lead mining at Petticoat Rake
Ribblehead Viaduct
Bishopdale Gavel Mine
Langstrothdale
Chapel le Dale
Ingleborough
Iron Age hillfort
Kettlewell Lead Mines
Ribblesdale
Littondale
Wharfedale
New Providence Lead Mine
Providence Lead Mine
INGLETON
0 2 4 8 km

Special Qualities of the YDNP

- YDNP Boundary
- Yoredale Uplands LCA boundary
- Extent of area that forms the backdrop to views from the Yoredale Uplands LCA

Cultural heritage*

- **A traditional pastoral landscape**
  [Traditional stone-built field barns]
- **An exceptional range of archaeology**
  [Strip lynchets & prehistoric field systems that are prominent]
- **Powerful reminders of periods of dominance by large estates and religious houses**
  [Ancient & historic parklands & other ornamental landscapes]
- **The remains of former rural industries**
  [Sites of former lead & coal mines & lime kilns]
- **Settle-Carlisle Railway Line**
  [Conservation Area]
- **Historic settlements with distinctive traditional architecture**
  [Conservation Areas - Note: the Swaledale and Arkengarthdale Barns and Walls Conservation Area is not shown]

* YDNPA Historic Environment Record

sheilsflynn

www.sheilsflynn.com

Cambridge Studio
32 St Barnabas Road
Cambridge CB1 2BY

telephone: 01223 229994
email: cambridge@sheilsflynn.com