LCA 17 South East Gritstone Uplands

Yorkshire Dales National Park
Landscape Character Assessment

YORKSHIRE DALES
National Park Authority

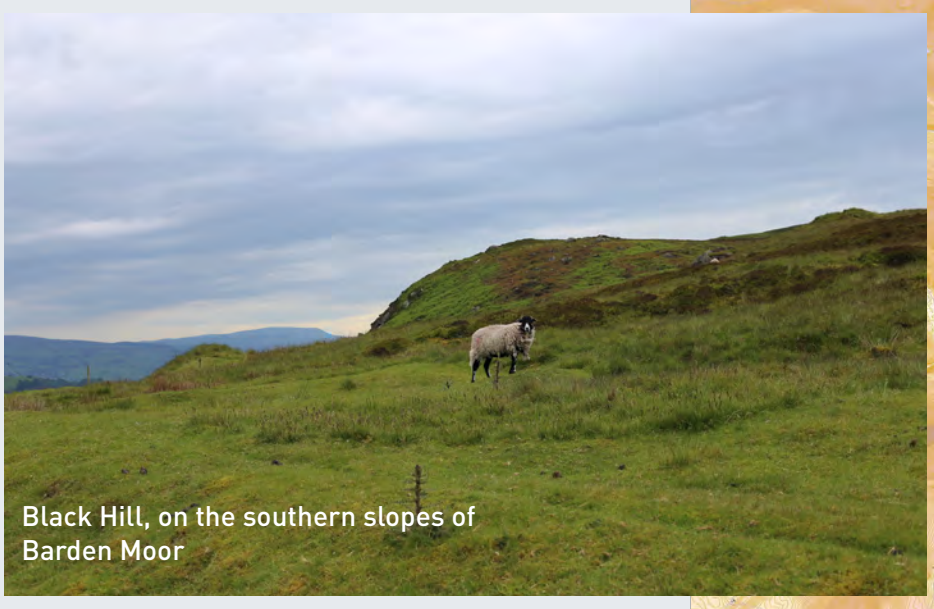
Restored Cupola Smelt Mill chimney on Grassington Moor

LCA 17 South East Gritstone Uplands



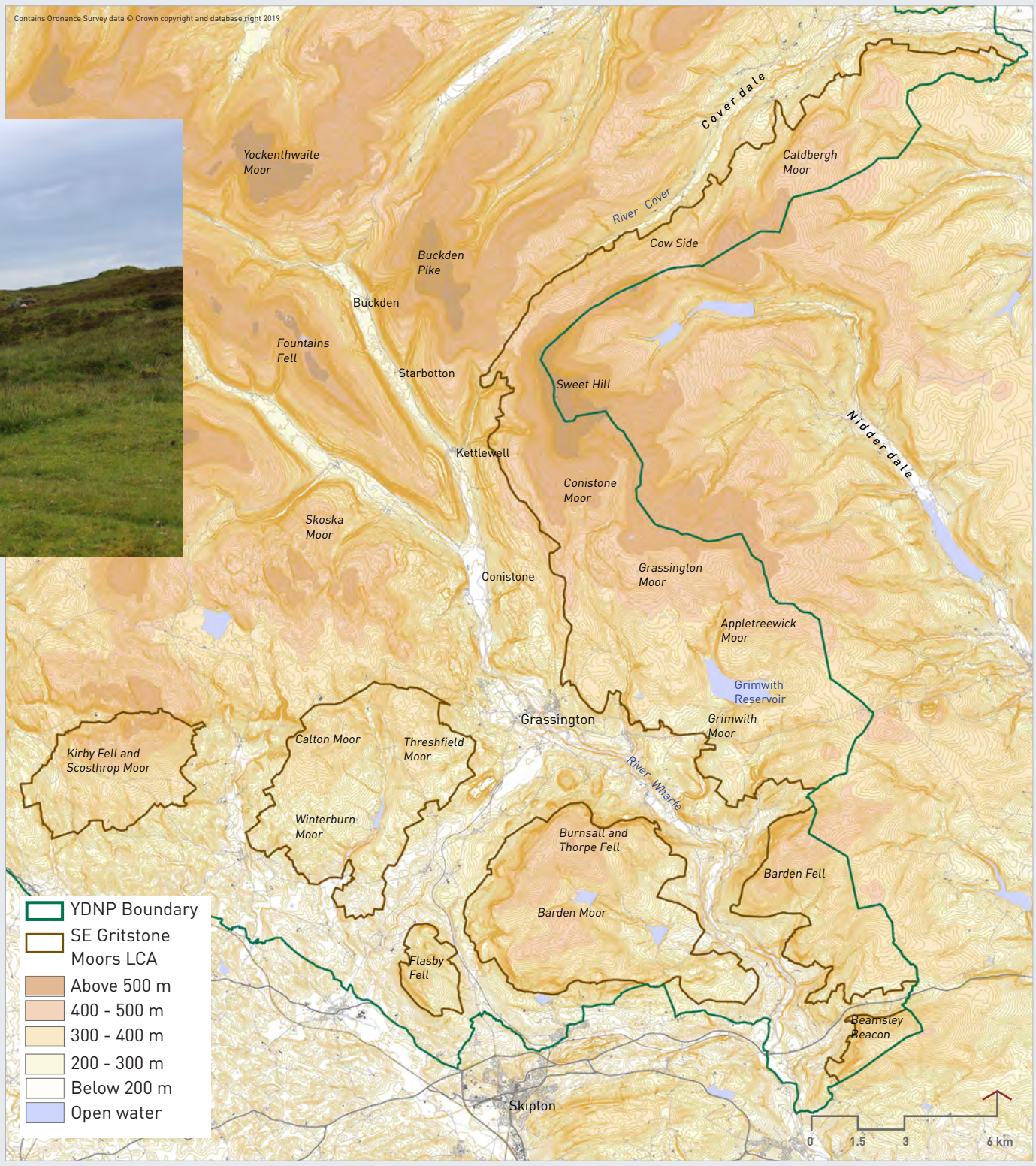
Key characteristics

- Elevated gritstone moorland plateau of gently rounded hills with occasional stepped slopes overlooking parts of Wharfedale and Coverdale, with a series of outlying hills to the west
- Gritstone crags and screes often punctuate the rounded landform; some pronounced lumpy knolls in the south of the area and conical peaks on Flasby Fell. In areas of deep drift deposits frequent erosion gullies give hillside slopes a ribbed appearance
- Steep-sided rocky gills cut through the gritstone, exposing underlying limestones and forming small waterfalls where rock ledges are crossed. Streams are shallow and rocky with steep, eroded sides of grass/heather covered banks, broadening to small rocky rivers at lower elevations
- Landcover is primarily acid grassland with extensive areas of upland heath on Barden Moor and the eastern fringes of the plateau
- Tree cover is often absent from the open moors, with scattered oak, mountain ash and birch on lower slopes or contained within sheltered gills. Linear stands of alder line watercourses at lower elevations. Conifer plantations are prominent and often blocky and intrusive in the northern and southern edges of the plateau fringe and on the slopes of the outlying hills
- Artificial reservoirs are a feature of Appletreewick Moor, Winterburn Moor and Barden Moor
- Settlement is sparse primarily comprising farmsteads along road corridors, and also around reservoirs and on the dales fringes. Buildings are a mixture of traditional and modern with associated tree cover, walled pasture and meadow and infrequent field barns
- The remains of lead mining, in the form of waste tips and disturbed ground, are strongly evident on Grassington and Conistone Moors and to a lesser degree in other parts of the plateau fringe
- Drystone walls enclose dale fringes giving way to larger areas of moorland enclosure or open moor
- Isolated roads and footpaths, with panoramic views across adjacent dales and lowlands



Black Hill, on the southern slopes of Barden Moor

Landscape context: South East Gritstone Uplands



Landscape context

The eastern and southern moors and fells are underlain by rocks of the Millstone Grit series, a thick sequence of alternating shales and coarse, hard wearing sandstones (Gritstones). The Millstone Grit forms a bleak, gently rolling, often featureless landscape, in contrast to the angular grandeur and detail of the limestone country.

The Millstone Grit of the eastern moors and fells extends east of Wharfedale and Coverdale, from Caldbergh Moor in the north to Beamsley Moor at the south eastern tip of the National Park, comprising the western edge of a much larger area of Millstone Grit which forms the Nidderdale plateau and stretches southwards through the Pennines into Derbyshire. The southern gritstone moors and fells are formed from Millstone Grit outliers, which became detached from the main plateau through erosion. These occur from west to east across the southern edge of the National Park, south of the outcropping Great Scar Limestone, at Kirby Fell/Scosthrop Moor, Winterburn Moor, Flasby Fell and Barden Moor.

Where deep valleys provide steeper edges, the strong grits stand out from the weaker shales, creating stacked, dark, blocky crags and outcrops such as those fringing Barden Moor at Thorpe Fell and Embsay Moor or at Simon's Seat east of Wharfedale. Large glacially transported boulders are occasionally strewn on the moor tops. An exposed pocket of limestone geology forms a miniature karst landscape at Trollers Gill, with cliffs, screes, limestone grassland and ash/sycamore tree cover.

The Grassington Grit is heavily mineralised, containing veins of argentiferous (silver bearing) lead ore, which were exploited by the Grassington mines, extending from Appletreewick to Conistone Moor. Thin coal seams were also mined at Threshfield and Grimwith Moors.

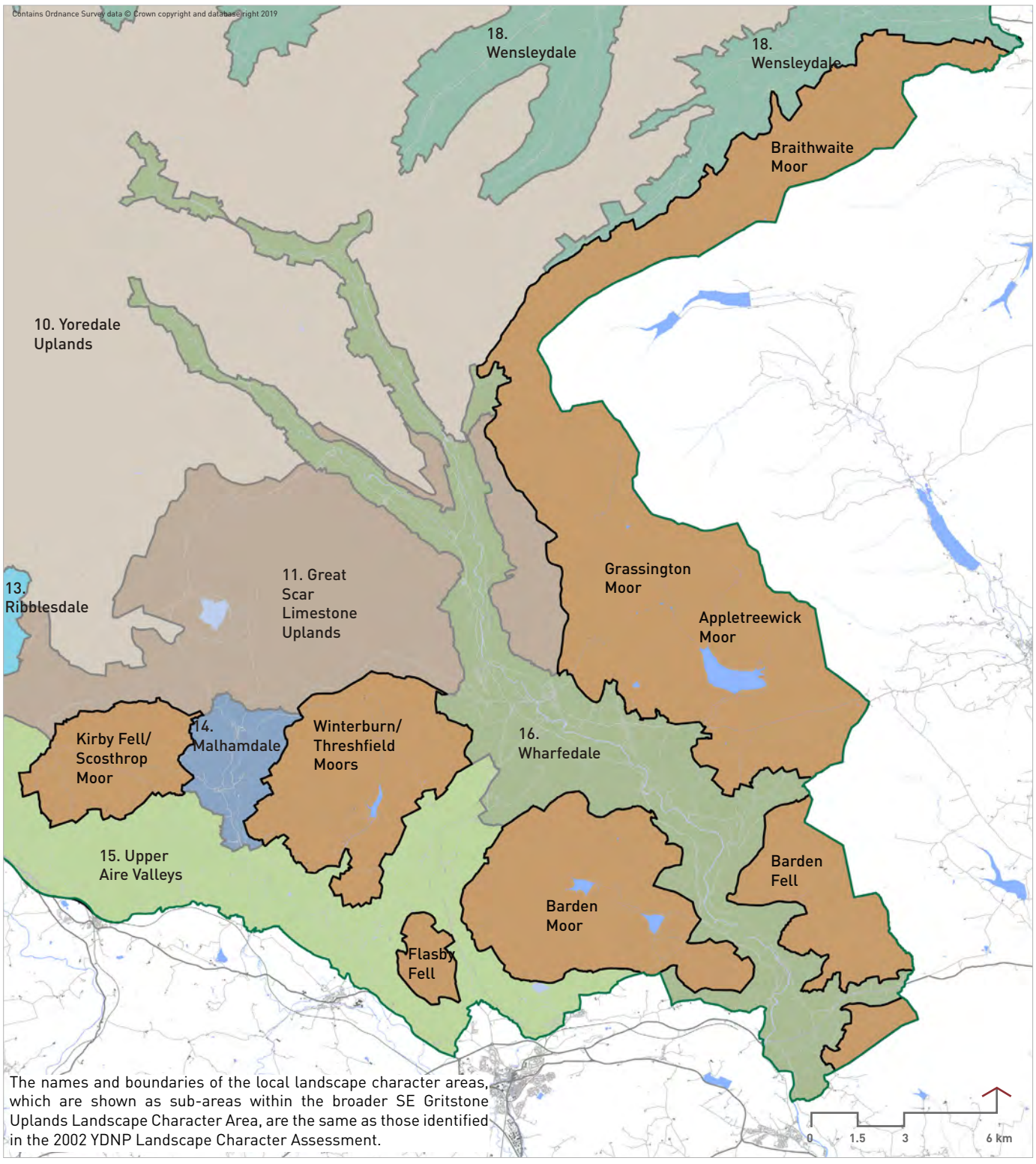
These elevated gritstone moors are overlain by a range of poorly drained and often permanently waterlogged acid soil types from loamy, loamy-peat to blanket peat. Soils are generally of poor agricultural value, supporting thin sheep grazing, grouse moors and (on Barden Moor and the eastern plateau) internationally important heath and blanket bog habitat.

Landscape character

The principal variations in landscape character at a local scale are:

- **Eastern Gritstone Moors and Fells** which form the western edge of the much larger Nidderdale Millstone Grit plateau. The area forms a narrow band along the Park boundary from Braithwaite Moor (near Coverdale) in the north to Beamsley Moor, above Wharfedale in the south. In its central section the area is divided from the central moors and fells along the valley between Coverdale and Wharfedale and lies above the limestone moors of Conistone on the eastern flank of Wharfedale.
- **Southern Gritstone Outliers,** which form four distinct islands of high ground within and overlooking the SE Dales Fringes at Kirby Fell and Scosthrop Moor, Winterburn Moor/Threshfield Moor, Flasby Fell and Barden Moor.

Landscape character: South East Gritstone Uplands



The names and boundaries of the local landscape character areas, which are shown as sub-areas within the broader SE Gritstone Uplands Landscape Character Area, are the same as those identified in the 2002 YDNP Landscape Character Assessment.



Barn in minor valley of the River Dibb, south of Grimwith Reservoir

Distinctive landscape character

These elevated gritstone moorlands have gently rounded summits and an expansive, remote character. The poorly drained and permanently waterlogged acidic soils are generally of poor agricultural value and support extensive sheep grazing, grouse moors and important heath and blanket bog habitats.

The waterlogged gritstone moors were less attractive to prehistoric settlers than the drier, limestone uplands, but parts of the area have been valued for minerals since Roman times. The moors north and east of Grassington contain one of the principal lead ore mining areas in the National Park (the other being in the north at Swaledale and Wensleydale). Early mining took the form of surface working of outcropping veins of ore, but later shafts were used to access the ores in the Grassington area. The Grassington lead mines operated from about 1600 until 1886, leaving extensive spoil heaps, industrial structures, roads and deep shafts. There was also a small coalfield on Threshfield and Linton Moor, where coal was dug by bell pit or adit methods.

Much of the elevated moorland tops are unenclosed; there are large moor-edge enclosed grazing allotments and the moorland fringe landscapes typically comprise enclosed marginal pastures of 'in bye' land. These are often the areas that form a backdrop to views in Wharfedale, Coverdale and the Upper Aire valleys. The SE Gritstone Moors and Fells have minimal settlement, although there may be occasional isolated barns and farm buildings on the moorland fringe slopes. Minor moorland roads are enclosed by drystone walls at lower elevations and are open with cattle grids on the moor tops.

Eastern Gritstone Moors and Fells

The main plateau has a gently rolling landform, with broad, rounded summits. There are occasionally stepped slope profiles and a transition to smaller-scale pronounced lumpy knolls at Barden Fell and Hazlewood Moor to the south east of the LCA. Steep-sided or rocky gills (eg Gate Up Gill, Blea Gill, Trunla Gill, Trollers Gill) cut through the gritsone cap, exposing gritstone crags and underlying limestones. In areas of deep drift cover (eg Cow Side in Coverdale) steep, incised erosion gullies run perpendicular to contours, giving the hillside a ribbed appearance.

Extensive crags and screes are found on the western edges of the area, where the gritstone has been incised by Wharfedale and Coverdale, Moorland streams are shallow and winding with rocky beds and steep eroding or grassy/heather covered banks, with occasional tree cover clinging to the sides of more sheltered gills. Downstream watercourses widen but maintain a rocky bed, with grassy banks, increasing tree cover, marginal habitats and rush filled hollows in flatter areas.

Landcover is primarily acid grassland with large tracts of upland heath; in acidic areas scattered stunted oak, mountain ash and birch may be found on lower hill slopes or in gills. Large patches of bracken have established on upper slopes, where drift deposits provide deeper soils.

Occasional plantation copses of beech and sycamore are found above Grassington, whilst linear stands of alder have established alongside larger watercourses at lower elevations (eg River Dibb). Groups of ash and sycamore are found in association with farmsteads. Conifer plantations are mostly absent from the area with the exception of a large block at Witton Fell (at the extreme northern tip of the area) and fringing blocks around Barden Fell in Wharfedale.

Settlement is very limited; isolated traditional farmsteads with modern outbuildings are alongside main roads (A59 and B6265) and there are occasional upland farms on the dales fringes and around Grimwith Reservoir. Farmsteads are often associated with walled meadows, enclosed rough grazing and infrequent field barns. Small roads, with wide grass verges and enclosed by drystone walls dead-end onto the moors. Wire fences and overhead lines typically follow road corridors and lead to farmsteads, but do not have a significant effect on character.

Grimwith Reservoir in the centre of Appletreewick Moor is used for recreation. The large lake has a low, grass covered dam and seems broadly in sympathy with the broad, open scale of the surrounding gritstone moors.

The extensive tips and workings left by the 18th and 19th C lead mining industry are prominent across Grassington and Conistone Moors.

Drystone walls enclose in-bye land around the dale fringes, giving way to large moorland enclosures across Appletreewick Moor. The open tops of Barden Fell, Hazlewood Moor, Beamsley Moor and Cow Side to West Scrafton Moor are enclosed to a lesser degree. Caldbergh Moor, Conistone Moor and Grassington Moor remain unenclosed, running directly into the contiguous and open Nidderdale Moors in the east. Walls are primarily constructed from gritstone but change to limestone over pockets of outcropping limestone geology, for example at Trollers Gill.

Southern Gritstone Moors and Fells

These outlying islands of elevated gritstone moorland are set within and overlook the Upper Aire tributary valleys and the lowlands beyond the southern boundary of the National Park. Generally, the steep northern and north-western flanks of the outliers contrast with the gently rounded, undulating slopes falling gradually to the south and east. Flasby Fell is dominated by the distinct pointed conical hills of Sharp Haw and Rough Haw.

Dark, blocky gritstone crags and screes crown the steep western flank of Barden Moor and there are small areas of scattered gritstone boulders on the moor tops and steep northern flank at Kirkby Fell on Scosthrop Moor. Occasional steep-sided eroding gullies are found at the edges of the moors.

Landcover varies between the different moors. Scosthrop Moor is almost entirely covered in acid grassland and rough pasture, lending the area a particularly bleak character. However, several elevated and isolated walled meadows (with field barns) stand out as bright green patches amidst the dull



Scarred landscapes - Grassington Moor

2

Extensive spoil heaps, ruined industrial buildings, roads and deep circular shafts disrupt the smooth slope profiles



3

browns and yellows of moorland grasses. Winterburn and Threshfield Moors comprise rushy acid grassland on the exposed moor tops with occasional high-level hay meadows and barns. In-bye pasture and meadows mainly occur in the shelter of the central valley or at lower elevations on the edges of the moor, around Bordley Hall in the north and Winterburn village in the south. Typically these areas are associated with small field sizes, occasional field barns and increasing tree cover, creating a transition from the moors to a dales character. Flasby Fell is primarily covered with rushy pasture and acid grassland, with several small pockets of upland heath on Sharp Haw. Barden Moor is comprised mainly of upland heath (used for grouse shooting) and larger pockets of acid grassland and rough pasture.

Pockets of broadleaved plantations are found on the lower slopes of Winterburn and Threshfield Moors, with ancient semi-natural woodland (including some conifer replanting) in the shelter of Winterburn Beck valley. Large areas of ancient semi-natural woodland with conifer interplanting also occur on the western slopes of Flasby Fell and the lower western slopes of Sun Moor at Barden Moor. There are extensive, blocky conifer plantations on the edges of Scosthrop Moor, Flasby Fell and Barden Fell, forming part of larger plantings, which extend down into the dales.

Settlement is confined to several Victorian stone lodges and farms around the reservoirs on Barden Moor and a chain of traditional farms, lodges and Bordley Hall in the central valley between Winterburn and Threshfield Moors. The reservoir dams are broad low grass covered banks, which stand out from the surrounding darker heather vegetation on Barden Moor due to their lighter colour. Access tracks to the reservoirs and grouse moors are constructed from limestone and are prominent as gleaming 'white ribbons' against the heather.

Gritstone walls enclose the fringes and tops of Scosthrop Moor, Winterburn and Threshfield Moors and Flasby Fell; enclosure at Barden Moor is limited to pockets of hay meadow and pasture near the reservoir, with the main body of the moor remaining unenclosed.

Numbered photographs illustrate specific key natural, cultural & perceptual features in the SE Gritstone Uplands (see page 6)



Appletreewick Pasture looking east



Tracks leading onto the open moor, bordered by drystone walls and wire fences







From Boss Moor, looking west to Winterburn Reservoir

Key natural, cultural and perceptual features

NATURAL

Low blocky gritstone crags and scattered boulder fields and screes expose the underlying dark bedrock. Landmark crags, such as Simons Seat, to the north of Barden Fell and Embsay Crag and Eastby Crag to south of Barden Moor. (9) Distinctive skyline profile of Flasby Fell with conical peak of Sharp Haw.

Extensive upland blanket bog and heather moorland which is of international conservation value (North Pennine Moors SAC and SPA). (11)

Pockets of limestone form miniature karst landscapes, eg. Trollers Gill, a rocky limestone gorge; cropped bright-green turf surrounds rock outcrops, with scattered ash, hawthorn and sycamore along the gill and clinging to rock ledges. (7) (8)

Shallow rocky streams and small waterfalls within eroding gullies, reveal contours and often expose the underlying shales and rock ledges (eg Black Gill Beck on the western edge of Scosthrop Moor). Patches and lines of trees and shrubs follow water courses, accentuating their presence in the vast open moorland. (10) (12)

CULTURAL

Clusters of gritstone 'cup-and-ring' rock carving sites, dating from the late Neolithic, on the west-facing slopes of Black Hill/Craven Moor (scheduled monuments).

Scarred landscapes - remains of the former lead mining industry - spoil heaps,'doughnut' shaped shallow shaft workings and ruined industrial buildings extend across a huge tract of moorland from Grimwith Moor to Grassington Moor and Conistone Moor. The restored Cupola Smelt Mill flue and chimney on Grassington Moor is a distinctive local landmark on the open moors. (2) (3) (4) (5)

Gritstone walls, which snake across the open moors as dark lines.

Trackways connecting mines and settlements, dales and farmstead, often bordered by drystone walls. (1)

Occasional small in-bye pasture and upland hay meadows in sheltered spots and near field barns.

The Tor Dyke linear earthwork (scheduled monument), which extends for some 2000m across the head of the valley between Upper Wharfedale and Coverdale, dates from the mid Bronze Age.

PERCEPTUAL

Open, sweeping and expansive landscape which feels bleak and **exposed to the elements.** (6)

Mosaic of contrasting colours and tones - the dark colours of the heathland contrasts with the bright green of bracken (and the duller, lighter greens and browns of acid grassland. (11)

Remote - the upland plateaux and summits are deeply tranquil and seem 'empty.'

Scattered sheep moving across the vast moor are a focus in views.

Panoramic views across adjacent lowlands from the upland fringes and outliers. (13)

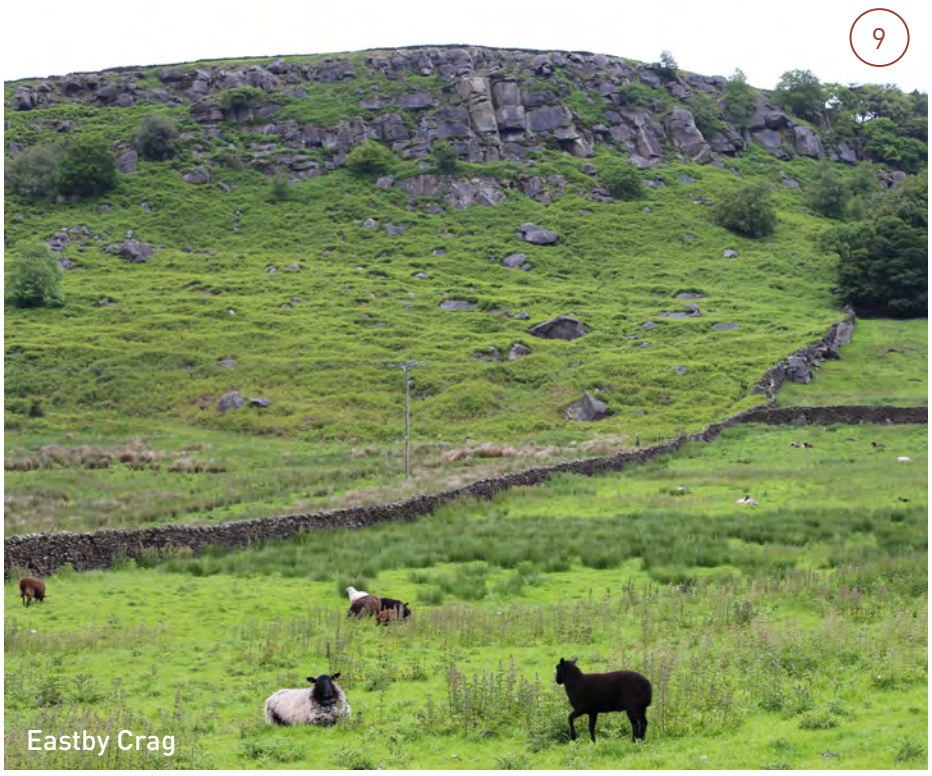
Photos that illustrate specific key natural, cultural and perceptual features are numbered eg. (10)



A miniature karst landscape of rugged limestone cliffs , dramatic crags and verdant turf
Skyreholme Beck



Trollers Gill
Scattered trees clinging to rocky ledges


9
Eastby Crag


© Chris Heaton cc-by-sa-2.0
Shallow streams within eroded gullies bordered by tussocky rushes
10
Ashy Gill, near Grimwith Reservoir

Dark crags and boulders expose the underlying gritstones at southern and western edges of the plateau


11
Extensive blanket bog of international importance (North Pennine Moors SAC and SPA)
Mosaic of contrasting colours and textures: darker heathland, bright green bracken and dull light green of acid grassland


Deeply incised erosion gullies - Upper Coverdale


12
Patches and lines of trees follow shallow, rocky streams
River Cover

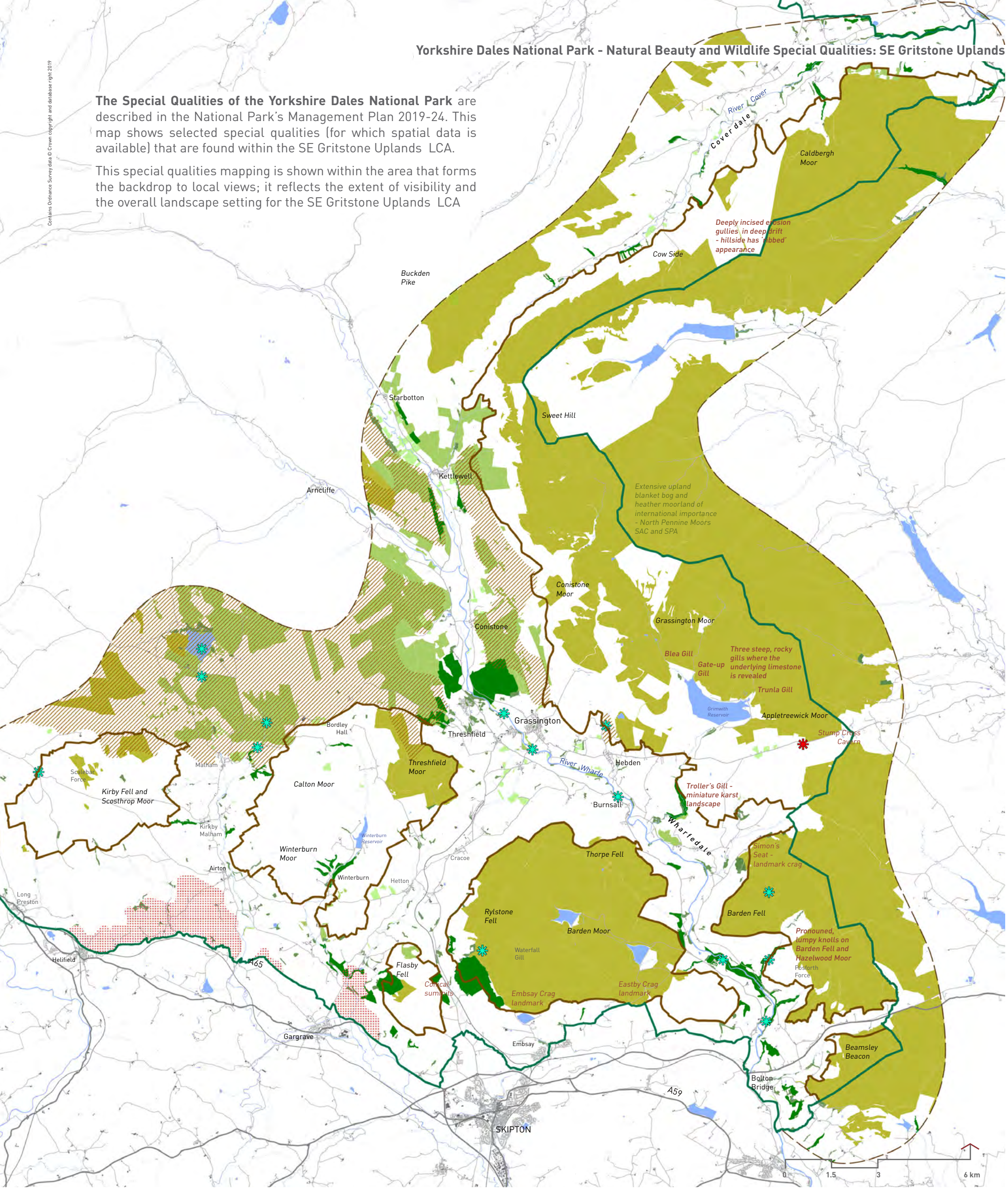

13
Open, unenclosed moorland tops, offering panoramic views across surrounding lowlands
Scosthrop Moor

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

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 SE Gritstone 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 SE Gritstone Uplands LCA



Special Qualities of the YDNP

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

Natural beauty

- **Dales with distinctive stepped profiles**
  [Displaying outcrops of rocks from the Yoredale series]
- **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]
- **Spectacular waterfalls**
  ['Water features' noted as 'recognised attraction' in YDNPA Visitor Strategy]

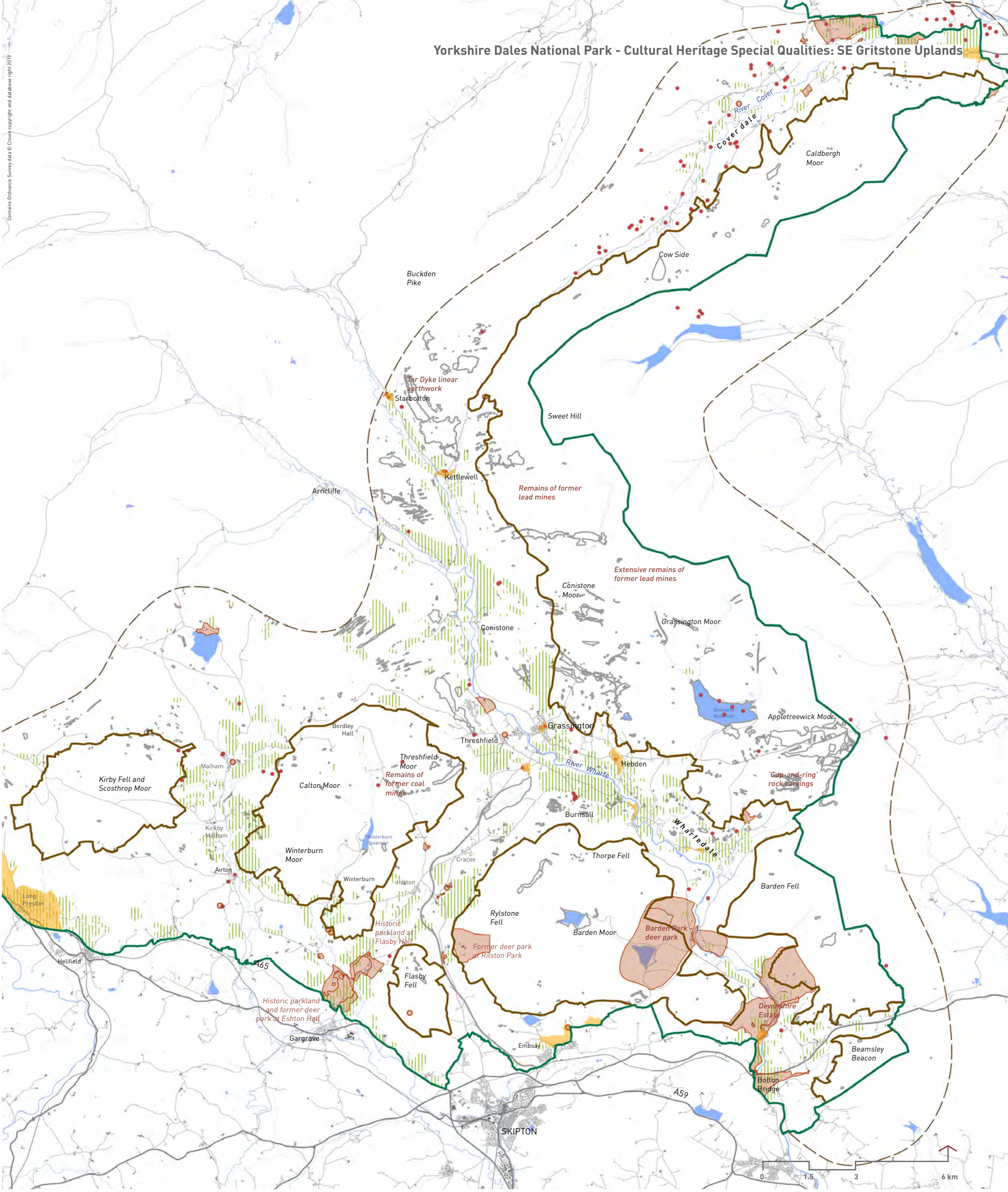
Wildlife*

- **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]

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Yorkshire Dales National Park - Cultural Heritage Special Qualities: SE Gritstone Uplands



Special Qualities of the YDNP

YDNP Boundary

SE Gritstone Uplands LCA boundary

Extent of area that forms the backdrop to views from the SE Gritstone 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]

Historic settlements with distinctive traditional architecture
[Conservation Areas]

sheilsflynn

www.sheilsflynn.com

Cambridge Studio
32 St Barnabas Road
Cambridge CB1 2BY

telephone: 01223 229994
email: cambridge@sheilsflynn.com