North Yorkshire Moors and Cleveland Hills

Character Area

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Key Characteristics

- Upland plateau landscape underlain mainly by sandstone and mudstone of Middle Jurassic age and, in the south, calcareous sandstone and limestone of Upper Jurassic age, with areas of undulating land arising from deposits of glacial till, sand and gravel.
- Plateaux dissected by a series of dales, often broad and sweeping but with steep-sided river valleys in places, floored by Lower Jurassic shales.
- Extensive areas of heather moorland on plateaux and hills, creating a sense of space, expansiveness and openness.
- Arable landscape to south and east, but pasture on elevated, sweeping plateaux and hills.
- Sparsely settled, with population concentrated in the dales and around the fringes.
- Valley landscapes characterised by predominantly pastoral farming with clear demarcation between the enclosed fields, farms, settlements and the moorland ridges above.
 The transition is often marked by bracken fringes.
- Panoramic views over moorland ridges, dales, surrounding lowland vales and the sea.
- Extensive areas of coniferous plantations especially on the Tabular Hills in the south-east and Hackness north of Pickering. Remnant areas of predominantly ancient, semi-natural woodland occurring mainly on valley side slopes, on escarpments and fringing hills.
- Traditional stone walls and hedgerows enclosing fields in the dales and lower fringing farmland - now often replaced by fences.
- Farms and villages built of predominantly rubble limestone or dressed sandstone with red pantile or slate roofs.
- Distinctive and dramatic coastal landscapes with high cliffs, small coves and bays, coastal towns and fishing villages.
- Rich archaeological heritage from many different periods especially on the high moorland plateaux.

Landscape Character

The North York Moors and Cleveland Hills are a very clearly demarcated block of high land in the north east of the counties of Yorkshire and Cleveland. To the north-east the boundary is the North Sea while to the north and west there is a steep scarp slope rising above the Tees valley and the Vale of Mowbray. Here a curiously shaped, conical outlier of Lower Jurassic rocks, Roseberry Topping, has become a distinctive and well-known landmark. The Cleveland Hills are the highest area but they merge into the Hambleton Hills in the south-west which in turn drop sharply down to the Vale of York. Along the south margin the Tabular Hills dip gently to the south and east but there is still a distinct change in slope where the land drops down to the Vale of Pickering.



England's largest expanse of heather moorland creates a strong feeling of space, openess and, sometimes, solitude and wilderness. Farmsteads or woodlands in these moorland areas, as here at Spaunton Moor, are noticeable in this otherwise open landscape.

The most notable feature of the area is the expansive sweep of unenclosed, predominantly heather moorland, at a remarkably low altitude, with long and panoramic views in all directions. This creates a strong feeling of space, expansiveness, openness and, sometimes, solitude and

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wilderness. The sense of remoteness is enhanced by the relatively few roads and settlements which are visible on the moorland plateaux. The upland plateaux contrast with the dales with their scattered farmsteads and patterns of dry stone walls enclosing small pastures. The central core of moorland is the watershed; the dales tend to run northsouth. The dales running south tend to be broad and sweeping in their upper reaches but are narrow and twisting where the rivers cut through the limestone and calcareous sandstone of the Tabular Hills; these include Newtondale and Forge Valley which were cut by pro-glacial meltwater. Other dales, such as those containing the tributaries of the Esk and the River Derwent, are narrower with fields and settlements contained by the moors and rivers winding round shoulders of rock. In some, steep slopes create dramatic narrow gorges often clothed with woods. However Eskdale, which separates the North York Moors from the Cleveland Hills, is a much broader valley and lacks the sense of enclosure of many of the other valleys. It has fine stone villages and extensive woodland but the limestone which influences some of the other dales is missing and the flora is not as rich.

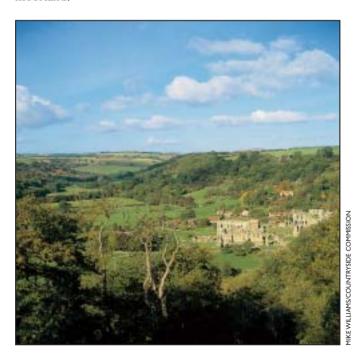
The upland extends eastwards to one of the highest stretches of cliff along England's North Sea coast. The close proximity of the sea to the high moors and the sheltered dales adds greatly to the character of the area. The coastline itself is dramatic with high precipitous cliffs dipping down, in places, to sandy or rocky bays. Small fishing villages cling to the steep valley sides in sheltered locations. The coastline includes some classical areas of British geology.

The highest land on the moorland plateaux lacks any tree cover so the wooded areas that do exist are often particularly prominent. In the south and east extensive



conifer plantations cloak stretches of moorland and valley sides. Elsewhere there are small broadleaved woodlands on the side slopes of the dales and many of these have been replanted as mixed woodland in the Hambleton and Tabular Hills. The isolated farmsteads in the upper dales are sometimes sheltered by groups of sycamores. Bracken is an important landscape feature too, forming a fringe to the moorland and marking the transition from moor to valley pastures. Often there are strong colour contrasts - most notably the purple of the heather in late summer, the russet of the bracken through the winter months, the green of the enclosed grasslands in spring and early summer and the darker areas of the conifers all year round. All these complement the grey or sandy colours of the stone buildings, villages and dry stone walls.

The scale of the landscape is generally large and sweeping and contrasts dramatically with some intimate views within the dales and wooded areas. In the south and east, where there are deeper soils, large fields are devoted to arable and root crops. The scale of the landform, the extensive views and the lack of boundaries, other than occasional fences, continue the feeling of openness from the moorlands down these lower slopes. The arable landscape also extends along the coastal strip where glacial deposits create good quality soils. Here there is a striking contrast as the farmed landscape extends right up to the edge of the high cliffs which then drop suddenly straight down to the sea. This coastal strip widens out in the north until it meets the East Cleveland Hills which are an area of rough pasture and moorland.



Major changes came with the arrival of the monasteries in the 12th century. Rievaulx Abbey in Ryedale was one of the most dominant, controlling extensive areas of moorland and establishing outlying Granges. The Abbey lies in Ryedale, one of the pastoral valleys which tend to run north-south into the central moorland core.

Physical Influences

This upland area of north east Yorkshire and Cleveland is underlain by rocks of Jurassic age which rise sharply from the adjacent lowland regions. Much of the raised plateau lies at over 360 metres in altitude but it has also been folded, with a major anticline running east-west and a subsidiary dome which is revealed at the coast near Robin Hood's Bay. A syncline contains the Esk valley with a further, less-pronounced, east-west anticline to the north, between the coast and Guisborough. The whole block tilts gently to the south and east and erosion over time has resulted in a singularly simple and majestic landform. Streams and small rivers have cut deeply into the plateau with the Esk running east to the coast and the Derwent and its tributaries draining south. Thick sandstones and thin impure limestones of Middle Jurassic age underlie most of the upland area to the north of the Tabular Hills. It is these rocks that form the dramatic scarp slope that rises sharply from the vale landscapes in the north and west and the precipitous cliffs along the coast from Kettleness to Scarborough. The fossiliferous limestone and calcareous sandstone of the Upper Jurassic Corallian Group create the distinct form and character of the Tabular Hills in the south and the Hambleton Hills in the west/south-west. The Tabular Hills include scarps that rise impressively about the moors but the rocks dip to the south to drop below the Upper Jurassic clays of the adjacent Vale of Picking. The Corallian Group also forms a cap to the hard resistant sandstones of the Hambleton Hills which rise some 250 metres above the vale as a precipitous scarp slope.

Lower Jurassic Lias Group rocks underlie the entire area and are exposed in the deeper inland dales and along the coast. They are predominantly shale and were exploited for alum, jet and cement stone concretions but also include seams of ironstone. Coal was also worked from Middle Jurassic rocks. These important mineral resources led to industrial activity over time especially in the Cleveland Hills. More recently potash and associated halite salts have been extracted from Permian Rocks at great depth at the Boulby mine.

This block of hard rocks resisted the glaciers of the last glaciation which moved down from the north and west deflecting the ice sheet to the west and east. Glacial action is therefore only revealed in the deposition of glacial till and sandy gravel in the north, and along a coastal strip only a few miles wide. These deposits result in a more undulating landform in these areas. Vigorous scouring by water associated with the glaciers has also cut deep valleys, notably the narrow gorge of Newton Dale which forms a link between the Esk valley and the Vale of Pickering to the south.

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The moors meet the North Sea in a distinctive and dramatic coastal landscape of high cliffs, small coves, bays, coastal towns and fishing villages, such as Robin Hood's Bay.

Historical and Cultural Influences

Signs of settlement and activity from prehistoric times onwards are still visible particularly on the moors where the remains have largely been protected by the heather moorland. There are barrows dating from the Neolithic period. The moors are also rich in cairns, tumuli and stone circles of the Bronze age, indicating that the area was populated at a time when the climate was warmer and drier and the land was thinly wooded and easily cultivated. Later generations seem to have been less inclined to settle in the area. The most notable Roman artifacts which have been found are Cawthorn Camps, a training camp and Wade's Causeway, a track running in a north to south direction over the moors as well as signal stations along the coast.

Place names indicate extensive settlement and farming by Angles along the south-facing Tabular Hills, while the Danes settled in the north-east and along the north and west sides of the upland block. Later Norse settlers moved in over most of the uplands. Carved stone crosses still remain from these early days of Christianity and often form striking landmarks along moorland roads and tracks.

Parishes tend to be large. Small nucleated villages arose in the valleys where there was sufficient cultivatable land to operate open field systems and provide basic crops. Livestock were grazed on the higher land. A royal forest, centred upon Pickering, stretched far to the west and north with small villages existing within it.

Major changes came with the arrival of monasteries in the 12th century, seeking to benefit initially from the remoteness of the area and then from the opportunities for sheep rearing. Rievaulx and Byland Abbeys were the most dominant, controlling extensive areas of moorland and establishing outlying granges. Enclosures of small fields around villages began at this time. Extensive enclosure of the open field system occurred after the dissolution of the monasteries, from the late 16th century, while larger

enclosures, dividing up the outlying pastures and common grazings on the moorland, resulted from the Parliamentary enclosures of the late 18th and 19th centuries. However much of the moorland still remains unenclosed.

From medieval times small-scale industrial workings, of stone quarries, coal and ironstone, have supplemented the agricultural economy and the legacy of this activity, including disused railways, is still visible on the moors and hillsides. Along the coast, jet has been extracted since the Bronze Age but reached a peak in the 19th century. Alum, for use in tanning and dyeing, was extracted by open quarries which have locally altered the landform especially along the coast. In the Cleveland Hills ironstone working has been locally important and, indeed, in this area there are more obvious industrial influences than in the more southerly parts.

As production of wool and meat became more important, the upland villages turned more of their fields over to permanent pasture and hay making and this, in turn, led on to the pattern of mixed agriculture currently in operation, albeit with silage replacing hay. Grouse shooting became an important activity on the heather moors. On lighter soils at lower altitudes arable crops were favoured and, since the 1960s, cover large areas especially to the south and east. In these areas, planting of extensive coniferous plantations between the 1920s and the 1960s altered the character of the landscape.



Helmsley, like most of the settlements in the area, is predominantly constructed in local stone. This creates strong visual unity and firmly links the settlements with the surrounding landscape. Roofs are often red pantiles, an unusual feature in an upland area.

Buildings and Settlement

The scattered farmsteads, villages and walls which are characteristic of the area are built from local stone. This creates a visual unity and links the settlements closely to the surrounding landscape. The pattern of villages was laid down early on, at the time of settlement by the Angles, Danes and Norse. These villages are small and nucleated,

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built of the local sandstone or limestone and roofed with red pantiles which is unusual in an upland area. This, coupled with the careful control of new development, has resulted in strikingly attractive small villages. The main market towns are located around the fringe of the upland block, and include Helmsley, Pickering, Whitby and Guisborough. Helmsley, Pickering and Guisborough are attractive inland market towns closely linked with the surrounding rural area, while Saltburn and Whitby are coastal towns, with economies based on tourism and fishing. The effect of tourism along the coast and the 'Victorian' influences on Saltburn, Whitby and Scarborough need mentioning.

The tight-knit fishing villages tucked into bays on the coast arose later than the inland farming villages with Sandsend first recorded in 1254 and Staithes in 1415. Rights to take profits from wrecks seem as significant as harvesting the products of the sea in these early times. Dwellings in the coastal fishing villages, such as Staithes and Robin Hood's Bay, are tightly packed together in narrow valleys leading down to the bays. Without gardens, and built almost on top of each other, the houses are connected by alleys and stepped lanes.

Rievaulx Abbey, the ruins of a Cistercian monastery established in the 12th century, has become one of the most famous sights of the area. Set in its own small twisting valley it is picturesque and evocative of times past, and has inspired many artists and poets. More recent structures also have a notable impact on the landscape, including: the chimney of the potash works at Boulby; the towering pyramid of the MOD installation at Fylingdales, which has now replaced the earlier 'golfballs' familiar to many people; the transmission mast at Bilsdale and large caravan parks on the cliff tops.

Land Cover

The area contains the largest continuous expanse of heather moorland in England and Wales. The dominant heather (Calluna Vulgaris) thrives on the acidic peaty soils in an area of relatively low rainfall while cotton grass and other species of rush and heath occur on more boggy ground. Since the second world war much moorland has been reclaimed to grow arable crops or planted with conifers. The moorlands which support a good cover of ling and associated species are those under a sound management regime, usually related to grouse shooting or moorland flock management. They often support a range of moorland birds such as curlew, golden plover and merlin.

Bracken represents a distinct transition zone occurring as a fringe to the moorland on the free-draining side slopes of the moors and valleys. Although it is an attractive part of the landscape, its spread into the moorland is a matter for concern among farmers and other land managers and this has given rise to co-ordinated efforts to control its advance.

Elsewhere the area is dominated by rough pastures and improved grasslands supporting the rearing of sheep and cattle. The grasslands of the dales have been subject to continued agricultural improvement since the war, with the consequent loss of semi-natural grassland and moorland to improved grass. In addition, the trend has been away from hay to silage resulting in much more homogenous green swards of vigorous grasses instead of species-rich hay meadows. A substantial part of the area is covered by coniferous forest, and wide arable landscapes occur on the limestone slopes and in the coastal areas. Broadleaved woodland remains an important landscape component.

The Changing Countryside

- · Much attention has been given in recent years to the continued loss of heather moorland, which is such an important feature of this landscape, and to the health and condition of the areas that remain. The loss of moorland to farming and forestry has been the most significant problem although changes in Government policy since 1981 have dramatically reduced losses. The spread of bracken is bringing about changes in the character of the moorland. Other changes result from the economic pressures on upland farming which make it more difficult for farmers to maintain the fabric of the landscape. As a result there are signs of dereliction, and eventual loss, of both hedges and stone walls as well as lack of management or inappropriate grazing of small woods, leading to their degradation and eventual loss. Some farms are being split up with the buildings sold to incomers, who convert them for residential use, and the land sold separately.
- Development pressures are also resulting in change to the landscape. There are particular pressures arising from tourist activity, especially around the coastal towns, but also, on a smaller scale, in the inland areas. Examples include extensions to caravan sites, introduction of brown tourist signs, localised public right of way erosion, disturbance of wildlife and increased fire risk on the moors. The increased levels of traffic have also brought change including improvement schemes to both major and minor roads. Death of sheep due to traffic is a problem and leads to pressure for fencing of roads which would, if implemented, destroy the sense of uninterrupted openness on the moorland plateau.
- The lower slopes of the Tabular Hills, the undulating glacial till of the coastal strip and the northern stretch of the Cleveland Hills have reasonably fertile and welldrained soils which support arable crops. This can lead, in places, to the anomalous situation of arable land occurring at higher altitudes than pastures. These areas also support some dairy and pig farming.

- On the steep slopes of the dale sides ancient and semi-natural broadleaved woodlands also occur which are subject to changes in extent and species. On more level plateau land, especially in the south-east, extensive conifer plantations have been established over recent decades. Many of these have reached the stage where they are being felled and replanted.
- Introduction of new features including new or altered military installations, communications masts, upgraded electricity infrastructure.

Shaping the Future

- · Most of the area is designated as a National Park and so many of the issues relating to change in the landscape are already being considered. For example, improved management of the fabric of the upland landscape is now being promoted through the land management scheme and a moorland regeneration programme assists with moorland management and improving its conservation. The main need is to ensure that such measures are continued and expanded where possible to ensure that the key features, notably the moorland and the contrasting enclosed landscapes of the dales and the coast, are conserved and enhanced.
- The age of the extensive conifer plantations in the southern part of the area means that felling and replanting will need to take place in the relatively short term. This could have adverse landscape impacts but also offers scope to improve the design of prominent areas.
- The Cleveland Community Forest is a positive influence in the north, offering opportunities to restore land damaged by industrial dereliction, to create new habitats and landscape features, and to enhance access and enjoyment.
- Development issues also need to be addressed, including those relating to tourism and infrastructure.



The majority of the Character Area is designated as the North York Moors National Park. The view of Thornton Dale shows the sort of natural beauty which is so popular with visitors.

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Glossary

anticline: a fold from whose axis the strata incline downwards on either side

syncline: a fold from whose axis the strata incline upwards on either side