

The Southern Howgill Fells

+ Physical Influences

These unusually shaped hills are formed from an outcrop of sequences of sandstones, siltstones and mudstones of Silurian age which contrast markedly with the igneous formations of the Cumbria High Fells to the west and the limestones of the Yorkshire Dales to the east and south east. Although the geological structure is relatively complex, the rocks all possess a similar resistance to erosion, which gives rise to the smooth, rounded shape that is so characteristic of these fells. Ice scouring during the last glaciation has only acted to emphasise the evenness of the slopes.

The rocks that make up the Howgill Fells are of pre-carboniferous origin. In the Cautley Spout area, close to the Dent Fault, there are outcrops of dark shales of the Upper Ordovician age. The bulk of the Howgills, as well as Middleton and Barbon Fell to the south, are the Silurian age (430-415 million years old), and some 60 million years older than the Carboniferous rocks that make up most of the Yorkshire Dales National Park. The Howgills are almost entirely composed of a very hard and compact sandstone – the Coniston Grit. Being uniform and resistant to weathering, it has produced rounded summits rather than rocky crags.

The most important feature of the geology of the area is the Dent Fault. The fault is the result of intense pressure caused when the rocks of the Lake District rose up some 2,400 metres against the horizontal strata on the Pennine side, pushing the limestones into a vertical position close to the fault plane. The fault, which is 32km in length between Kirkby Stephen and Kirkby Lonsdale, is a classic example of a reverse fault and forms the physical division between the two contrasting types of scenery – the smooth flanked Howgills and the horizontal limestone scars of the Yorkshire Dales.

Although the mountain mass of the Howgills was large enough to have its own ice cap during the last Ice Age, ice from the Lake District and Pennines may have hemmed the Howgills in ice, reducing the amount of erosion that could take place. The rounded summits therefore show very little glacial erosion. Cautley Crags are the only glacial features, where the cliffs rise up from behind the beginnings of a corrie, the higher valleys of Red Gill and Swere Gill being hanging valleys.

Several small streams flow off the hilltops and down the gills in a radial pattern from the central core, to join the River Lune in the north and west, and the Rawthey in the east and south.

+ Historical and Cultural Influences

The difficult landform has prevented settlement, and there is a notable absence of archaeological features on the fells. Access has been limited to the river valleys that provided routes around the edge of the group of hills. They have thus been little affected by any particular phase of historical or cultural activity, although they have been cleared of woodland and used for grazing for many centuries. The hills are unenclosed and are grazed in common. The rights are held by farming families based in the adjoining valleys, and form a major part of the local farming economy.

For many years the fells were seldom visited and overlooked as a recreational resource because of the popularity and proximity of the better known Cumbria High Fells to the west and the Yorkshire Dales to the south. In recent years, they have attained a higher profile mainly due to the Wainwright guide to walks in the area and because of their visibility from the M6 motorway. Nevertheless, the fells remain the province of the serious walker and local people who recognise their distinctive character and appreciate their quietness and seclusion.

+ Land Cover

The majority of the area consists of acidic grassland with small stretches of heather. Blanket bog occurs on some of the higher, flatter hilltops, while bracken covers the freer draining side slopes. The fell land, grazed by sheep and wild ponies, is unfenced and there is virtually no tree cover. Small woodlands in the steep sided gills are of hawthorn, ash and alder. Some small plantations of conifers occur on the lower side slopes beyond the character area boundary, notably above Sedbergh, which

have a significant effect on the local landscape. The isolated farmsteads are sheltered by groups of mature sycamore.

Agricultural intensification of some rough grazing land on the lower slopes of fells has resulted in a reduction in visual diversity and textural variety in the landscape. Similarly, increases in grazing pressures have reduced the extent of heather cover, and may have exacerbated some of the soil erosion, although this is also a natural phenomenon. The general trend of intensification of livestock rearing has also led to the abandonment of small farm buildings.

Small conifer woodlands in rectangles, unsympathetic to the local landform, have been planted on the lower slopes of the hills.

The number of tourists, while small, is growing, and there are a few well-worn paths that have a local impact. Development pressures have been relatively low, although some communications masts and power lines have been constructed.

+ Southern Howgill Fells Landscape Character Area

Landscape Character Types (Draft National Types in brackets)	Landscape Character Areas	Location
Moors and Fells (HDO)	Southern Howgill Fells	Howgill Fells south of Carlin Gill, Ben End and The Calf

35. Southern Howgill Fells

+ Key Characteristics

- Massive, wild, open, and inaccessible upland, composed of Silurian rock overlain by moorland vegetation types and rock screes.
- A series of velvet smooth, distinctive, well defined closely spaced ridges fan out from dome shaped fells to create long, steep sided dales and steep dark rocky gullies with occasional steep, tumbling waterfalls.
- Many of the gills are steeply incised and cut through the overall smooth form of the fells, creating a sharp contrast in the form of gills and fells.
- Virtually treeless; where trees occur, they cling to occasional exposed rock edges and rocky valley sides.
- Expansive and exposed, the moorland provides largely unenclosed grazing for sheep and wild ponies.
- Almost total absence of roads and settlement.
- The smooth, deeply folded form of the uplands play host to a pattern of light and shade.
- Long range views are available from the fell tops to the summits of Helvellyn to Ingleborough, and from Morecambe Bay to Cross Fell.

+ Landscape Character

The Southern Howgill Fells form the southern half of this distinctive upland area that is well defined by adjacent landscapes of contrasting character. The southern fells fall within the north western corner of the Yorkshire Dales National Park, whilst the northern Howgill Fells fall beyond the Park boundary. The low-lying Lune corridor lies to the west and the Rawthey Valley lies to the south and east.

The landscape of the Southern Howgill Fells is distinctly different from the uplands of the Yorkshire Dales and the other Lakeland fells. The fells comprise a discrete group of steep sided, smooth rounded hills, dominated by Arant How, The Calf, Fell Head and Bram Rigg Top, sharply incised by a number of gills, and were aptly described by Wordsworth as the 'naked heights'. Reaching elevations of over 600m, by their remarkable form they stand out noticeably from the surrounding land. The folding of the geological strata that make up the fells is sometimes visible, for example on the western face above Black Force.

A large part of the fells consist of relatively high and exposed open moorland, which provides uninterrupted views. The fells are unenclosed, but drystone walls separate the open common land of the fells from the rough pastures on the lower slopes that form the valley sides of the adjacent character areas.

There is evidence of severe erosion on some of the steeper slopes, whilst others are covered with loose scree. Small streams cascade over black rocks down the narrow rocky gills, occasionally forming dramatic waterfalls, notably Cautley Spout.

The southern Howgills are isolated and inaccessible. There is no settlement on the fells, settlements being confined to the lowest slopes falling within adjacent character areas. No roads cross the fells with the exception of the unfenced Fairmile Road, a short section of Roman Road, part of the route between Ribchester and Carlisle forged by Agricola in AD 79, which crosses the lower slopes in the extreme north west of the character area. A relatively dispersed pattern of footpath and bridleways provides access along the ridges and gills.

There is no woodland cover on the fells, although occasional isolated trees and small groups of trees occur within steep sided gills and cling to rocky outcrops. Small blocks of conifer trees planted on the boundary of the character area on the lower slopes of the fells appear alien. The main vegetation communities of the Howgills have been greatly influenced by grazing stock. Acidic grassland dominated by mat grass is the most abundant habitat, patterned by the sheep trods that furrow the slope on the better drained fell sides, with the lower slopes around the perimeter of the fells dominated by bracken. Heather is likely to have been much more widespread in the past but today there are only remnants. Small springs and flushes on the lower slopes are the most diverse habitats. The main area of exposed rocky outcrops is at Cautley Crag, although other less significant outcrops occur along with areas of rock scree.

Due to the absence of settlement few features of historic interest occur, although there are some hut circles on the western edge of the fells.

Dominated by the unusual and dramatic form of the hills dissected by narrow gills, and consequent inaccessibility, the Howgill Fells retain a sense of remoteness and wilderness.