



Eat Meet Discover Explore

Bowlees Visitor Centre

The perfect introduction to nature and the landscape in the North Pennines Area of Outstanding Natural Beauty and UNESCO Global Geopark.

Visitor information • events • family activities • walking and nature trails • waterfalls • wildlife garden • gift shop • gallery • exhibitions • great food & drink in the café • picnic area • car parking (voluntary charge)

Opening times:

Daily, 16 Feb - 24 Feb (10am to 4pm) and 16 Mar - 26 Oct (10am to 5pm). Daily 27 Oct - 3 Nov (10am to 4pm)
Weekends only 25 Feb - 15 Mar (10am to 5pm) and 4 Nov - 8 Dec (10am to 4pm)

Newbiggin, Barnard Castle, County Durham DL12 0XF

Tel: 01833 622145 www.visitbowlees.org.uk www.northpennines.org.uk

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HIGH FORCE

HOTEL AND WATERFALL



High Force Waterfall is one of the most impressive in England.

The River Tees has been plunging into this gorge for thousands of years but the rocks it reveals are much more ancient – with origins dating back over 300 million years.

Group Bookings | Coach Parties
Weddings | Events | Food & Drinks | Accommodation

For more information visit www.highforcewaterfall.com



The North Pennines is one of England's most special places – a peaceful, unspoilt landscape with a rich history and vibrant natural beauty. In recognition of this it is designated as an Area of Outstanding Natural Beauty (AONB). The area is also a Global Geopark – an accolade endorsed by UNESCO.

This lovely 4 to 5-mile (6.5 – 8km) walk, starting from Bowlees Visitor Centre or High Force car park in Upper Teesdale, introduces you to some of the special features of the landscape around High Force and Low Force.

North Pennines AONB Partnership
www.northpennines.org.uk
+44 (0)1388 528801
info@northpenninesaonb.org.uk

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Bowlees Visitor Centre, Bowlees,
Newbiggin, Barnard Castle,
Co Durham, DL12 0XE
01833 622145
www.visitbowlees.org.uk
visitbowlees@northpenninesaonb.org.uk

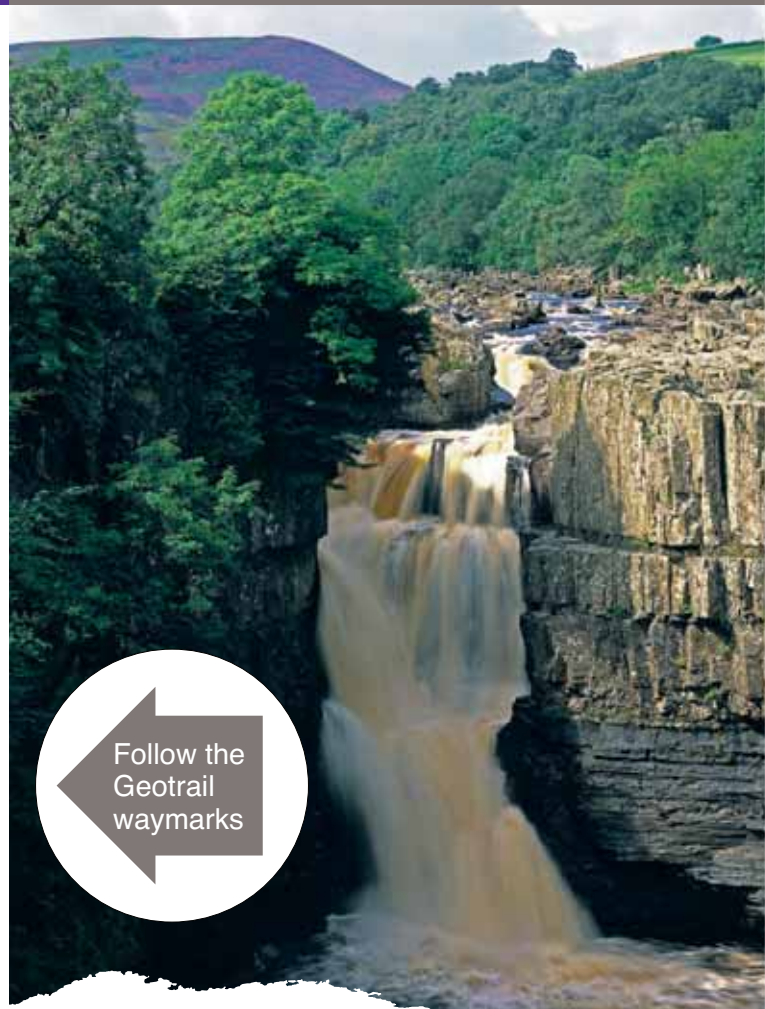
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HF & Bowlees Geotrail

Landscapes for life
NORTH PENNINES
One of the AONB family
[.org.uk](http://www.northpennines.org.uk)

02/19/3K



High Force and Bowlees Geotrail

Whinstone, waders & wild flowers

NORTH PENNINES
Area of Outstanding Natural Beauty

United Nations
Educational, Scientific and
Cultural Organization

North Pennines
UNESCO
Global Geopark

Welcome to Upper Teesdale in the North Pennines AONB & UNESCO Global Geopark

This beautiful landscape has been shaped by millions of years of Earth processes and thousands of years of people living and working here.

This circular walk, from Bowlees Visitor Centre or High Force car park, will introduce you to rocks with dramatic origins, ice age features, ancient settlements, lead mining heritage and wonderful wildlife.

What is a Geopark?

The North Pennines AONB is a UNESCO Global Geopark, a place with outstanding geology and landscape, where there are strong local efforts to make the most of Earth heritage through interpretation, education, conservation and tourism. To find out more visit www.europeangeoparks.org and www.globalgeopark.org

Walk length/time: Approx. 4–5 miles (6.5–8km) (depending on High Force route options) with 120m of ascent, taking about 2½–3 hours.

Start/finish: Bowlees Visitor Centre NY 907 282 or High Force car park NY 885 286

Terrain: Public rights of way and permissive paths with gates and stiles, and short stretches of minor road.

This walk is mainly on paths and tracks through fields and beside the River Tees. **⚠️ Please take care crossing the road and near the cliff edge just east of High Force.** The route is gently undulating but with a few short, steeper ascents and descents. Walking boots or strong shoes are recommended. Please keep to paths, leave gates as you find them and keep dogs under close control.

Public transport: For timetable information call Traveline on 0871 200 2233 (www.traveline.info)

Facilities: Bowlees: visitor centre, café, gift shop, local produce, art gallery, events, picnic area, family walking trail, information, toilets, parking, e-car charging point, activities (www.visitbowlees.org.uk)

High Force: hotel, parking (charges apply), gift shop, toilets, path to base of High Force (www.highforcewaterfall.com)

Useful maps:

Ordnance Survey

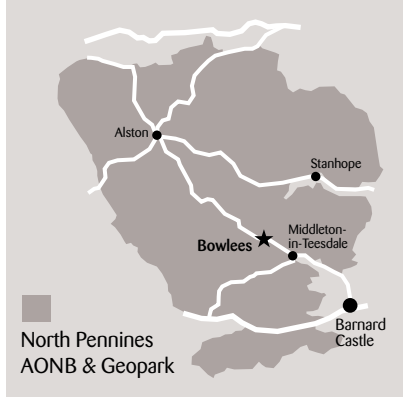
1:50 000 Landranger

91 Appleby-in-Westmorland

92 Barnard Castle & Richmond

1:25 000 Explorer

OL31 North Pennines



Rocky foundations

Life in the tropics

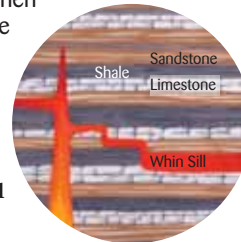
The rocks that make up most of the North Pennines are layers of limestone, sandstone and shale. They formed around 320 million years ago, when this area lay near the equator. Limy ooze, sand and mud in tropical seas and deltas hardened into the rocks we see today. Most of the walls and buildings you'll see are made of sandstone.



Ancient tropical delta

Molten rock

A very different rock layer forms Teesdale's most dramatic landscapes. This is the Whin Sill, which you'll see at Low Force and High Force. It formed 295 million years ago when molten rock solidified underground to become dolerite (or whinstone). It is now exposed at the surface after millions of years of erosion.



Formation of the Whin Sill

A landscape for people and wildlife

A working landscape

People have lived in the North Pennines for 10,000 years and have left tantalising traces for us to discover. From prehistoric hunter-gatherers to Victorian lead miners and today's farmers, people have used the land and resources around them. Human activity has profoundly affected the landscape and continues to shape it today. This walk takes you through a working countryside of stone walls, sheep, cattle and hay meadows.

Buried treasure

Criss-crossing the fells are veins of lead ore and other minerals. They formed around 290 million years ago, when minerals crystallised out of hot fluids deep underground. The North Pennines is famous for its minerals, which have been mined for centuries.



Galena (lead ore)

Ice and water

Today's landscape has been shaped by ice and water. In the last ice age, 20,000 years ago, there would have been a mile of ice above you here. Ice scoured the land and dumped clay and boulders. Torrential meltwaters carved gorges like those at Low Force and High Force. The landscape continues to be sculpted by modern rivers.



Low Force

© M Byron

Wild and wonderful

The North Pennines is fantastic for wildlife and Upper Teesdale is particularly special. As well as being important for upland birds (see overleaf), this is the home of the 'Teesdale Assemblage'. This uniquely rich association of plants includes rare Arctic-alpine plants like the spring gentian. If you're here in late spring and summer look out for wild flowers, especially along the Pennine Way verges between Wynch Bridge and High Force, and in hay meadows around the route.



Front cover: High Force © Graeme Peacock
Painted map and illustrations (unless otherwise credited) by Elizabeth Pickett

View across Teesdale from the track between Dirt Pit and Bowlees

Bird hot spot

With its mosaic of dale and moorland habitats, the North Pennines is one of the best places in England to see the birds of the uplands. In spring and early summer the calls of wading birds – curlew, oystercatcher, golden plover, snipe, redshank and lapwing – fill the air. Upper Teesdale is particularly special as it is a vital refuge and breeding ground for the rare black grouse.

Lapwings

© Elizabeth Hickett



Whitewashed

You'll see that many of the buildings on this side of the River Tees are white, giving a distinctive character to much of Upper Teesdale. This shows that they are part of the Roby Estate, which is owned by Lord Barnard of Raby Castle. On the other side of the river is the Strathmore Estate, owned by the Earl of Strathmore.

From High Force Hotel walk

between the hotel and gift shop and turn right along a path. Follow the footpath through the fields, past two barns, towards Dirt Pit.

High Force view (bottom)

Take the path which heads downhill from a wooden kiosk where you pay a small charge.

to Alston

Buried treasure

Look at the hills ahead and you'll see a V-shaped notch in the skyline. Known as Coldberry Gutter, this huge opencast working along a lead vein dates back to at least the mid-18th century. Miners excavated it with picks and shovels and periodically flushed it with water to clear loose material.

North Pennine lead miners in a painting from the early 1800s

© Science Museum/Science & Society Picture Library



The long view

From this track there are great views across Teesdale. You can see the craggy Holwick Scars which are made of the same hard whinstone you see at Low Force and High Force. On the skyline down the dale is a dark clump of trees. This is Kirkcarrion, the site of a large Bronze Age burial cairn.

The rolling, grassy hillocks along the bottom of Teesdale are a legacy of the last ice age and are known as 'drumlins'. They formed when ice flowed down Teesdale and shaped clay and boulders into smooth, streamlined mounds.

Cross the junction and follow the road down to Dirt Pit. Continue along the track to Bowlees.

High Force view (top)

At Holwick Head Bridge keep straight on for 900m, then retrace your steps.

Scale (metres)



Map based partly on OS mapping © Crown Copyright. All rights reserved. Durham County Council, LA 1004949055, 2018.

What's in a name?

Like Low Force, High Force plunges over the Whin Sill. Below the Whin Sill you can see layers of sandstone and limestone, part of the sequence of rocks that make up most of the North Pennine landscape. 'Force' comes from 'foss', the Old Norse word for waterfall. This, along with other local landscape words like 'dale', 'beck' and 'fell', came here with Viking settlers around 1,100 years ago.

Trees from the wildwood

Approaching High Force you walk between prickly, evergreen shrubs, part of the largest juniper wood in England. Juniper is a relic of the woods that grew here after the ice age ended around 15,000 years ago. Juniper berries are famous for flavouring gin but here they provide food for mice, voles and migrating birds like fieldfares.



Moor House – Upper Teesdale National Nature Reserve (NNR)

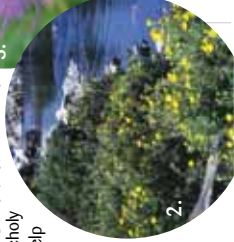
Part of this walk, between Low Force and High Force, is within the Moor House-Upper Teesdale NNR. This large reserve stretches over parts of County Durham and Cumbria and contains a wide range of North Pennine upland habitats, from hay meadows and juniper woods to limestone grassland and blanket bog. For more information contact 01833 622374.

Fantastic flowers

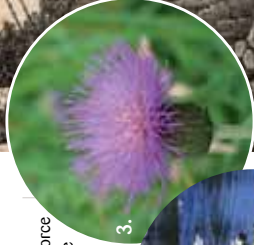
The Pennine Way verges between Wynch Bridge and High Force contain over 200 plant species. Several belong to the unique 'Teesdale Assemblage', for which Upper Teesdale is famous. Look out for 1 globeflower (flowering May–July), 2 shrubby thistle (June–July) and 3 melancholy look after these special plants by keeping to the path.



1. © S. O. NierRebecca Barrett
2. © Margaret Brabbshaw



2. © Margaret Brabbshaw



3. © Margaret Brabbshaw

Hay time

In early summer many of these hay meadows are full of colourful wild flowers like yellow rattle, meadow buttercup, red clover and meadow-sweet. The North Pennines has over 40% of the UK's upland hay meadows, which survive because many farmers practise traditional low-intensity farming methods.

© NPA/Rebecca Barrett

Ⓛ Bowlees Visitor Centre

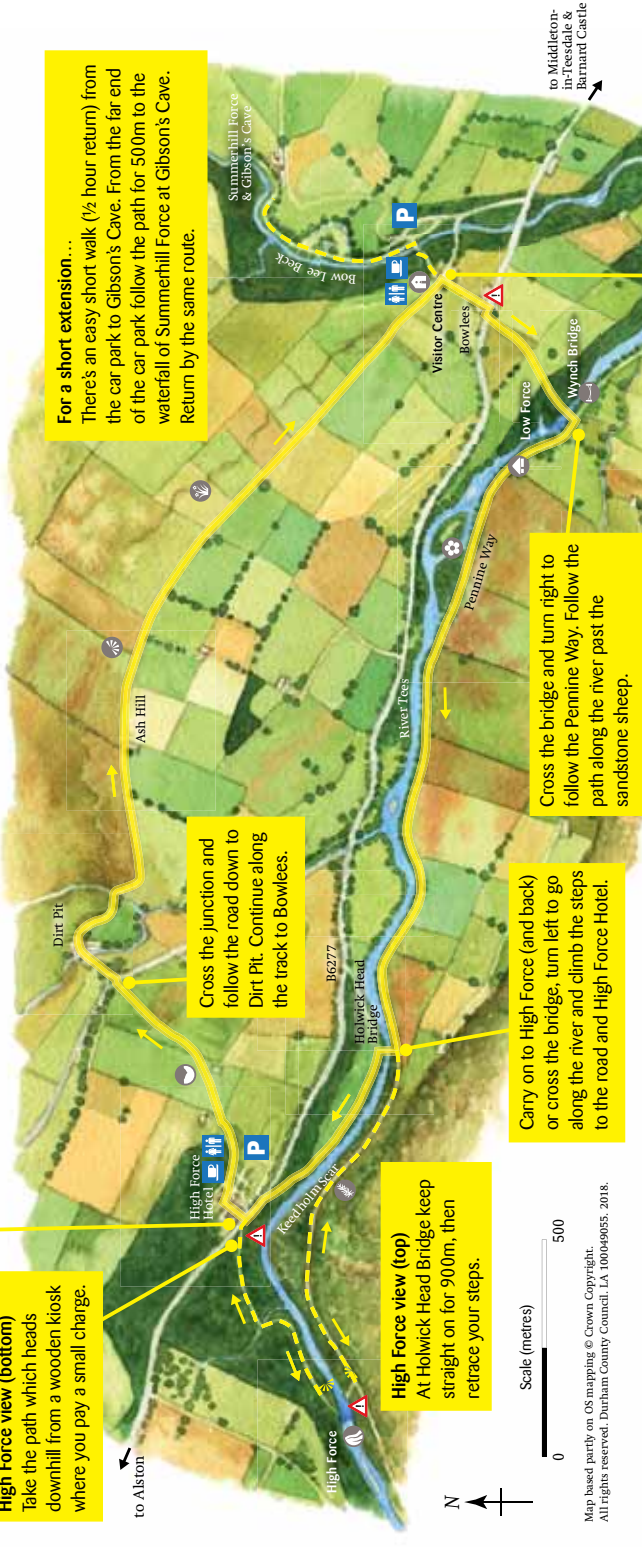
Bowlees Visitor Centre is in an old Primitive Methodist Chapel. Now you can enjoy our popular café and discover more about the area's remarkable landscape, geology and wildlife.



Bowlees Chapel, around 1900

© Beamish Museum Ltd

For a short extension...
There's an easy short walk (½ hour return) from the car park to Gibson's Cave. From the far end of the car park follow the path for 500m to the waterfall of Summerhill Force at Gibson's Cave. Return by the same route.



Vanished village

In the fields on your left there are the remains of a late prehistoric or Roman Period settlement. There's little to see now but 2,000 years ago you would have seen several round houses. The people who lived here hunted in surrounding woods, fished in the river, kept livestock and grew crops.

From Bowlees Visitor Centre walk to the main road. Cross the road and follow the footpath to Wynch Bridge.

Wynch Bridge and Low Force

Just upstream from Wynch Bridge are the waterfalls of Low Force. Here, the River Tees tumbles over the hard dolerite or 'whinstone' of the Whin Sill, which also forms the rocky gorge beneath the bridge.

The suspension bridge dates from 1830 and replaces an earlier one which collapsed in 1802. The bridge was originally built so that lead miners from Holwick could cross the river to work in mines on the north side of Teesdale.

