

FIELD TRIP TO CURBAR EDGE, BASLOW, DERBYSHIRE

Saturday 4th August 2018



Exposure of the Chatsworth Grit (Millstone Grit Group) at Curbar Edge, with the same sandstone forming a prominent cuesta on Baslow Edge in the distance. The steep scarp slope of the Chatworth Grit has been extensively quarried for millstones, with the lower slopes mantled by rockfall and head deposits. The Chatsworth Grit here comprises very coarse-grained, cross-bedded sandstone with quartz pebbles up to 3 cm diameter, deposited within a fluvial channel system carrying and depositing sediment from the east, but ultimately of northern provenance. *Photo: Andy Howard*

<p>Excursion title</p>	<p>Upper Carboniferous stratigraphy in the southern Pennines and Yorkshire Coalfield – a geological mapping experience</p> <p>CURBAR EDGE, BASLOW, DERBYSHIRE</p>		
<p>Date & time</p>	<p>Saturday 4 August 2018, meet at 10.30 am Curbar Gap Car Park, Curbar Edge</p>	<p>Finish time:</p>	<p>4.00 pm at Curbar Gap Car Park, Curbar Edge</p>

Leaders	<p>Colin Waters, Honorary Professor, University of Leicester</p> <p>Andy Howard, Honorary Research Associate, British Geological Survey</p>
Excursion aims and description	<p>The Excursion will demonstrate examples of the Chatsworth Grit of the R_{2c}2 cycle of the Millstone Grit Group (late Namurian - Marsdenian) and the Crawshaw Sandstone from the basal part of the Pennine Lower Coal Measures (early Westphalian - Langsettian), providing interpretations of their genesis. There will be practical demonstrations of the techniques used in geological mapping of the unexposed strata in the moorlands located between the crags associated with these two sandstones, providing insights on the levels of accuracy and certainty that can be attained and presented on geological maps in this region. The trip enables both comparisons and contrasts to be drawn with the stratigraphy, depositional environment and provenance of the early Westphalian succession to be demonstrated at Graves Park on Sunday 5th August, and also shows how a detailed stratigraphy can be mapped geologically in areas of limited exposure. However, the trip can also be attended on a standalone basis.</p>
Registration	<p>Numbers are limited to 20, pre-registration is required by email to fieldtrips@yorksgeolsoc.org.uk</p> <p>Please include the full name of all attendees in the email.</p>
Meeting point	<p>Curbar Gap Car Park, Clodhall Lane Curbar Edge, near Baslow, Derbyshire (Grid Reference SK 2624 7472). Car Park is pay and display, please bring plenty of change (daily charge £4.00 at 31 May 2018). The car park is busy at weekends and car sharing is advised. If the car park is full, alternative parking is available on the roadside along Clodhall Lane.</p> <p>Make sure any valuables in your car are locked away out of sight.</p>
Getting there	<p>Curbar Gap Car Park is located about 2km north east of Baslow and 1km east of Curbar village, easily accessible by car.</p> <p>Click here for Google Map</p>
First locality	At Meeting Point above
Excursion route:	Circular walk along Curbar Edge, with a traverse across to White Edge, returning to the car park via Sandyford Brook.
Terrain, walking distance, height gain:	Total walking distance about 3.5 km, mostly on good and well-used footpaths, but with a traverse across uneven heather moorland in which the path is less distinct and is locally muddy. Total elevation change 50m

<p>General information</p>	<p>The parts of Curbar Edge and White Edge visited on this excursion occur in open access land within the Peak District National Park. It is normally very busy with walkers and rock climbers on a weekend.</p> <p>An unfenced cliff face is present adjacent to the path in the initial part of the circular walk. Although rocks will be inspected in the vicinity, participants are required to avoid approaching too close to the vertical face or throwing objects over the cliff. Trips and falls are a potential hazard on uneven ground linking the main pathways. The use of geological hammers is not permitted at this site.</p>
<p>Safety and Insurance</p>	<p>Registrants will be sent a Health and Safety risk assessment and fieldwork Code of Conduct by email in advance of the trip. You are requested to read both these documents carefully before the trip and take account of risks and recommended safety measures and clothing when planning your attendance. You will be given a safety briefing by the leaders at the start of trip, and will be asked to sign an attendance register to declare that you have read these documents and understood the briefing.</p> <p>The Yorkshire Geological Society has insurance arranged by the Geologists' Association which covers the Society and field trip leaders for public liability. Personal accident insurance is a matter for individual members and participants to arrange as they consider necessary.</p>
<p>Recommended clothing</p>	<p>Stout footwear (walking boots) recommended, waterproof overclothing, sun hat and sun block</p> <p>Hard hats or high visibility vests are not required</p>
<p>Recommended geological equipment</p>	<p>Hand lens, compass (smartphone compass is satisfactory), ruler (15cm), clipboard (for holding A4 sized map and handouts), pencil and rubber.</p> <p>Optionally, smartphone with following apps installed (both available for free from Apple or Google app stores):</p> <p>British Geological Survey iGeology app</p> <p>Ordnance Survey OS Maps app</p>
<p>Lunch and refreshments</p>	<p>Participants should bring a packed lunch and drinks to keep hydrated. There are no nearby Café facilities, though an ice cream van is commonly stationed at the car park on warm days.</p>
<p>Toilets</p>	<p>There are no public toilets available either at the starting point or on the trip. The nearest public toilets are at Nether End Car Park, Baslow, about 5 minutes' drive from Curbar Gap Car Park (Grid Reference SK2581 7212).</p>

<p>Geological mapsheet for reference</p>	<p>Curbar Edge is at extreme SW corner of BGS 1:50,000 series Sheffield Sheet 100, Bedrock and Superficial Geology, published 2011.</p> <p>Click here to view online. See also adjacent sheets 99, 111 and 112.</p>
<p>OS mapsheet for reference</p>	<p>1:50,000 Landranger Sheet 119 Buxton and Matlock</p> <p>1:25,000 Explorer Sheet OL24 The Peak District, White Peak Area</p>
<p>Recommended reading</p>	<p>Hallsworth, C. R. and J. I. Chisholm, J. I. 2005. Provenance of Upper Carboniferous sandstones in east Derbyshire: role of the Wales–Brabant High. <i>Proceedings of the Yorkshire Geological Society</i>, 55, 209-233.</p> <p>Waters, C. N., Chisholm, J. I., Benfield, A. C. and O’Beirne, A. M. 2008. Regional evolution of a fluviodeltaic cyclic succession in the Marsdenian (Late Namurian Stage, Pennsylvanian) of the Central Pennine Basin, UK. <i>Proceedings of the Yorkshire Geological Society</i>, 57, 1-28.</p>



View westwards from Curbar Edge, with blocks of Namurian Chatsworth Grit and an abandoned, partly dressed millstone in the foreground. Below the Edge, the valley of the River Derwent forms the lower ground, occupied by the villages of Curbar and Calver. The valley is underlain by the older Namurian strata of the Kinderscout Grit and Bowland Shale Formation. These strata drape the eastern margin of the Viséan limestones and reefs of the Derbyshire carbonate platform, which forms the rolling hills beyond the two villages. *Photo: Andy Howard*