EXCURSION

Bradford Dale

Leader: Colin Bagshaw

This evening excursion consists of a walk of about 4 km return, mainly along part of the delightful valley of the River Bradford eroded mainly into limestones of Upper Visean (D, and P, Zone) age.

It begins in the village square of Middleton by Youlgreave (SK196632) where there is space for parking vehicles. Limestone buildings date back to the early 19th century when the village was rebuilt by the local lord of the manor, the archaeologist Thomas Bateman. It was then a centre of agriculture and lead mining. Of even older origin, at the northern edge of the village now occupied by Castle Farm, is the site of a 16th century castle that was a royalist stronghold during the Civil War. It was then occupied by the family of Sir Christopher Fulwood, who met an untimely end in the valley below after a skirmish with a troop of Roundheads led by Sir John Gell. By contrast, the village is now a haven of peace, and the well on the north side of the village square is dressed in the summer.

Bradford Dale is reached by the path to the east opposite the children's playground where there is also a memorial to the crew of a Wellington bomber that crashed nearby during World War II. Green Farm is to the right of the path, and nearby is Dale Cottage with a barn built of limestone, of which some blocks contain numerous fossils of brachiopods, corals and crinoids. Just beyond, take the left fork for the descent into the valley. Some 20m along the path, outcrops of the top part of the Monsall Dale (D₂) limestone contain shell debris. A further 50m down the path, more limestone outcrops contain bands of dark coloured chert beneath which are numerous colonies of compound corals (Siphonodendron, formerly known as Lithostrotion). Higher up, the outcrop contains the so-called Lathkill Shell Bed of bioclastic limestone with the brachiopod Gigantoproductus. The cliffs to the right of the path are topped by Eyam Limestone of P₂ age.



Further along the descent are scattered white "bricks" engraved with words making up various quotations created by the local community. This is one of the "Sites of Meaning" which make up a series of "Markerstones for the Millennium" in the area (see www.sitesofmeaning.org.uk).

The foot of the slope is at the River Bradford, where there are remains of a sheep dip, built with blocks of local gritstone. There are also indications of a former waterwheel pit that was used to raise a water supply up to Middleton village.

Continue along the path and where it swings round to the east a series of dammed ponds, each about 100m long, are interconnected by channels controlled by sluice gates. Constructed at the end of the 19th century, the ponds were initially designed to breed trout, which can still be seen in the clear water. The ponds are now the home to various water birds that build their nests in the more shallow water. A bridge over the river has its low wall inscribed with a quote from Wordsworth as a further "Site of Meaning".

The path then passes through a gate into the Haddon Estate and on the right is a steep scree slope that. The limestones dip gently to the east, so that the Eyam Limestone is gradually dipping down to river level. The screes, particularly alongside the fourth pond, are in part the waste from old lead mines, and careful examination reveals small specimens of calcite, barite and rare galena. Mineral occurrences increase towards the end of this pond where there is the ditch of a worked rake to the right, descending the valley side acutely. There are also blocks of basalt, commonly vesicular; this is the Lathkill Lodge Lava, with outcrops in the river bed that may be responsible for the river staying above the surface and not sinking underground.

One of the adit entrances to the Wenley Hill complex of old lead mines, lying to the south of Youlgreave, is just beyond the next pond. About 200m further on an old clapper bridge crosses the river to the left. To the right, a steep path up the valley side leads to another mine entrance at a fault in the thinly bedded, dark Eyam Limestone. This indication of the onset of more argillaceous sediments is confirmed a few metres further up the path where it reaches the top of the valley side and presents an open view to the south. The slope of the fields represents the dip to the southeast of the Namurian shale, leading down to the scarp of Ashover Grit that forms the skyline. To the left, the tips of the old Mawstone mine have been worked for fluorite in recent years.

Return to Middleton either by the footpath to the right across the fields, or back along the Dale, or cross the clapper bridge for the road into Youlgreave where an interesting church and several hostelries await.

The path along Bradford Dale.