YGS Field Excursion to Todmorden, 7 June 2025

We will examine two excellent exposures of the 6-inch coal and the strata above and beneath it. Beneath is a seat earth of various facies and above are barren shales followed by the Subcrenatum Marine Band, previously known as the *Gastrioceras subcrenatum* Marine Band, the base of the Westphalian, here the Pennine Lower Coal Measures. We will also see evidence of extensive historical coal mining.

We will observe how the topography reflects the succession of mudstones and sandstones and examine some nice examples of sedimentary structures, such as trough crossbedding.

We expect to see examples of *Dunbarella* in the marine band, together with crushed goniatites. If we have a goniatite expert in the group, we may be able to confirm that they are indeed *Gastrioceras subcrenatum.*



The 6-inch coal in the lower part of the clough.



Cross bedding in a small sandstone quarry, which also contains the remains of Carboniferous ‘logs’.





Dunbarella from the marine band and a goniatite in a calcareous nodule.

Brian Jeffery

Peter del Strother