

## WNFC 2022 Geology Field Meeting to the Black Country Geopark

Our excursion on Saturday 10th September to the Black Country Geopark was on a fine day. Our 23 members were joined by 5 members of Teme Valley Geological Society and led by Andy Harrison of Black Country Geological Society. We met up at Wren's Nest and were introduced to the UNESCO site covering 45 important geological sites. We then went on passing through trench cuttings showing nodular beds of limestone (Fig. 2) which is the Silurian Lower member of Much Wenlock Limestone.



Fig. 1 Snake Pit Quarry where Much Wenlock Limestone was quarried – mainly used as building stone and the production of lime and later used as a flux for blast furnaces



Fig. 2 The nodular limestone



We then came to Murchison's Lookout which is the south end of Wren's Nest that looks out across to Castle Hill in Dudley (Figure. 3 above)



Figure 4. Showing three large pillars and two tunnel entrances with the right hand tunnel blocked with stone cases with a small opening near the top to let the bats come and go in this limestone cavern.

Then the party were led down to view the Seven Sisters – seven rock columns that supported the roof of a huge Wenlock Limestone cavern where rock was extracted and loaded onto canal barges (Fig. 4). We returned to the cars via the Marsh's Quarry (Fig. 5) and on to have a quick lunch before embarking onto our designated canal barge.



Figure 5. Marsh's Quarry



Figure 6. All aboard with our canal guide and Mrs Harrison who came to join the party with our white helmets



Figure7. A sandstone crag with a life-size model of a Carboniferous dragon fly

Back to the cars and onwards to the final destination of Saltwells Nature Reserve. It originally contained warm salt water springs but these were destroyed by coal extraction beneath them. Andy Harrison showed us the unconformity at Brewins Tunnel. The Old Red Sandstone is missing, a gap of 100 My which lies between Silurian and Carboniferous Strata. This rock has eroded away. The last stop was Doulton Clay Pit that exposed three deposition cycles (cyclotherms) from the Lower Coal Measures formation of the Carboniferous Period. The fireclay deposit was extracted for Royal Doulton China factory at Burslem.

Before departing, Janet Cooper gave the vote of thanks on behalf of the members on our visit to this industrious area.