Walk 11: Tickow Lane

Start: grid reference [SK 4630 1862]

This easy walk follows cuttings along a disused railway track to see rarely exposed examples of the Triassic and Quaternary geology of Charnwood Forest. Park on the wide verge off Tickow Lane, just to the south of the railway bridge, and take the footpath on the northern side of the bridge. The footpath leads off to the east, and along its left side burrowing rabbits have conveniently brought out sand and pebbles belonging to a Quaternary- age deposit that you will see more of farther on. Just before the path joins the disused railway line, ribs of red-grey Triassic sandstone are exposed underfoot. This sandstone forms the local bedrock (the 'solid' substrate) to the Quaternary deposits. Turn right (westwards) and walk the short distance to the archway of the Tickow Lane bridge. Under here you will see exposed a crumbly, very coarse-grained, pebble-rich deposit, called gravel. Look closely at these pebbles — they are mainly of quartzite and were derived from the erosion of Triassic conglomerate exposed elsewhere in the Midlands. Also present are tabular fragments of pale grey Triassic siltstone. The gravel is cross-bedded, indicating it was deposited by currents. These currents were generated within river systems that flowed beneath and as outwash from the vast ice sheet that covered most of Britain over 400000 years ago. Thus the gravel is classified as a 'glaciofluvial' type of deposit. Under the archways you will also see some crumbling brickwork — the remains of a short-lived canal that was rapidly replaced by the railway. The canal diggings led to the discovery of a lead mine in the Triassic sandstones here, but its entrances are now boarded up.

Continue westwards along the track, and after about 200m it enters a cutting that exposes red, Triassic sandstone of the Shepshed Sandstone Member on either side. Look closely at fresh exposures — the sand particles that form this rock are of medium grain-size, but there are larger (a few millimetres to centimetre-size) angular fragments of local Precambrian rock types. Their presence, together with large-scale cross-bedding, suggests that the sandstone was deposited by currents flowing within rivers that crossed the Charnian rock outcrop. Probably the headwaters of these rivers lay within Charnwood Forest, which was a mountain range in early Triassic times (see Walk 2).

Figures

(Figure 71) The Tickow Lane gravel.

(Figure 72) Disused railway cutting exposing the Shepshed Sandstone.



The Tickow Lane gravel.



Disused railway cutting exposing the Shepshed Sandstone.