Walk 2: Bardon Hill

a Precambrian volcano and the Triassic unconformity

Ascent: about 90 m

Distance: 2.6 km

Difficulty: fairly easy on good path

Start: grid reference [SK 4580 1406]

This walk takes in some unusual rocks, belonging to the Bardon Hill volcanic Complex, which may have formed in the conduit of a Precambrian volcano. It starts at the footpath (the 'Ivanhoe Way') leading from Dauphine Close off Romans Crescent, which joins Greenhill Road linking Abbot's Oak and the Agar Nook estate. The main path turns east, just inside the wood, but then, after about 100m, take the right- hand branch leading southwards. The slope here has been landscaped with quarry rock debris. At the top keep straight on to the main quarry fence for expansive views (1) [SK 46200 13437] of Bardon Hill summit and quarry. This is the territory of the nationally rare 'Charnwood red' spider, and peregrine falcons may be seen too. Continue upwards along the fence, and as it curves towards the summit ridge (2) [SK 46279 13324] examine large quarried blocks of the Bardon Breccia. All of the fragments are of a type of volcanic rock known as andesite, and the breccia texture is particularly obvious when the surfaces are wet. Continue over the crest of the ridge, through a gate, and turn right along the metalled track leading past the transmitter installations. On the lower, south side of the ridge (3) [SK 46041 13154] are naturally weathered exposures of Bardon Breccia. The Bardon Breccia possibly formed when semi-solidified andesite magma rose upwards into the conduit of a volcano, and shattered into pieces as it cooled.

Continue along the ridge past the trig point on Bardon Hill summit (278m), the highest point in Charnwood Forest. At the end of the track, an information board gives more details about the geology of Bardon Hill and the quarry. The stunning view from here takes in the central and western parts of the quarry, where Precambrian rocks are being extracted to make roadstone. Quarrying has revealed a major unconformity, where red Triassic Mercia Mudstone strata, with thin green-grey siltstone beds (Walk 5), fill deep valleys, sometimes called 'wadis', eroded into the grey Precambrian rocks. Wadis can be seen in deserts throughout the world. Note that owing to a process known as differential compaction, the Triassic strata sag downwards into the deeper parts of the valleys. Bardon Hill is one element of a landscape carved by desert winds and storms through the Permian and into the Triassic Period. It is part of the Charnwood Forest range of 'fossil' hills, at least 250 million years old, that are only now re-appearing from beneath their Triassic covering.

By following the track eastwards off the summit ridge it is possible to circle round Bardon Hill and back to the starting point.

Figures

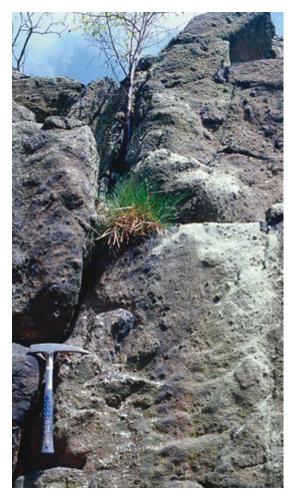
(Figure 93) Walk 2: Bardon Hill. Map

(Figure 36) Bardon Breccia on the south slope of Bardon ridge.

(Figure 37) View from the summit, looking west into Bardon Hill Quarry showing the Triassic unconformity.



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Bardon Breccia on the south slope of Bardon ridge.



View from the summit, looking west into Bardon Hill Quarry showing the Triassic unconformity.