Claverley Road Cutting, Shropshire

[SO 794 940]

Introduction

Claverley Road Cutting exposes an excellent section through the Lower Triassic Wildmoor Sandstone Formation. The formation consists predominantly of sandstones, which preserve a wide range of sedimentary structures, such as flat bedding, and planar—tabular and trough cross-bedding. It is thought that this sequence was deposited in rivers, although there is some evidence for aeolian processes. The site is important for the study of Lower Triassic stratigraphy and for the analysis of palaeoenvironments.

Although this site is of great regional and national importance, it is only mentioned very briefly in the literature (Whitehead and Pocock, 1947). The sedimentary characteristics of the Wildmoor Sandstone Formation have been documented in detail by Wills (1970a,b, 1976).

Description

The site consists of a steep-sided road cutting, up to 3 m high and about 150 m in length, located south-west of Woodfield House, north of the village of Claverley.

The section shows a thick sequence of bright red, fine-grained sandstones of the Wildmoor Sandstone Formation, formerly termed the 'Upper Mottled Sandstone'. Towards the base of this unit the sediment contains many spots and streaks of green sandstone (Whitehead and Pocock, 1947). Sedimentary structures are well preserved, particularly towards the top of the section, and include planar bedding and trough cross-bedding (Figure 3.54). Palaeocurrent indicators, including the cross-beds, indicate flow to the north-west.

A borehole sunk near Claverley has sampled rocks with a range of ages, including the Permian Clent Breccia (Whitehead and Pocock, 1947). The Permo-Triassic sediments in the borehole section consisted of red marls and sandstones, with occasional beds of breccia.

Interpretation

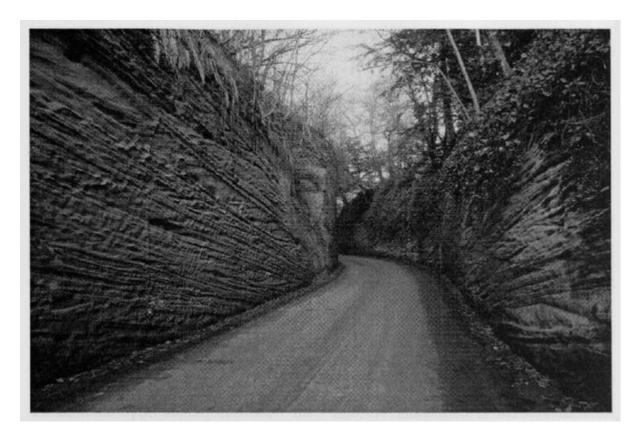
The Triassic sediments in the road cutting at Claverley were deposited under predominantly terrestrial conditions. Their sedimentological characteristics, for example the trough cross-bedding, reflect deposition under fluvial conditions. Some of the sediments exposed here show features that suggest that the dominant fluvial deposition may have been interrupted periodically by aeolian processes. The northwesterly palaeocurrent indicators in the fluvial deposits suggest that the rivers here formed part of the generally NW-flowing Bridgnorth river system identified by Wills (1948; (Figure 3.50)).

There is no direct evidence of the age of the Wildmoor Sandstone, either at Claverley or elsewhere. The unit overlies the Kidderminster Formation, which is usually placed in the lowest part of the Triassic System. The Wildmoor Sandstone has yielded some fossils elsewhere (see above), but these do not offer objective evidence of age, so the unit is simply dated conventionally as Early Triassic (Warrington *et al.*, 1980, p. 38).

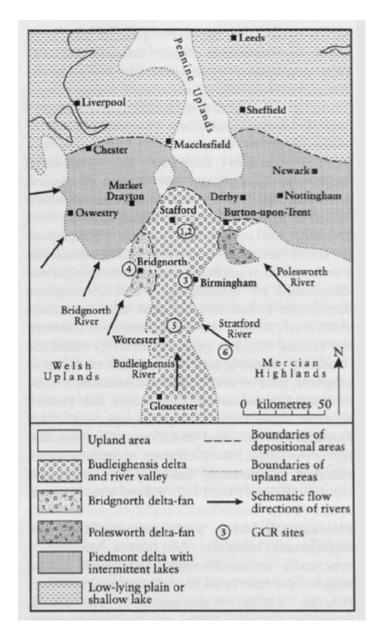
Conclusions

The section exposed at Claverley is a key locality for the interpretation and study of Lower Triassic palaeoenvironments in the Midlands. The sandstones were deposited by a large river system, with occasional phases of aeolian deposition.

References



(Figure 3.54) The Claverley Road Cutting section through the Wildmoor Sandstone Formation, general view of the steep-sided cutting. (Photo: English Nature/Peter Wakely.)



(Figure 3.50) Early Triassic palaeogeography of Central England, showing postulated major river systems, based on palaeocurrent measurements and studies of clast provenance. 1, Hulme Quarry; 2. Brockton Quarry; 3, Wollaston Ridge; 4, Claverley Road Cutting; 5, Burcot; 6, Shrewley (After Wills, 1948.)