
Bickleigh Wood Quarry

Highlights

Bickleigh Wood Quarry is one of the most important inland sites for studying the sedimentology of the Crackington Formation, and includes some of the best preserved flute marks known anywhere in Britain.

Introduction

This is a disused quarry east of the A396 Tiverton to Bampton road, Devon [SS 944 180]. It exposes steeply dipping sandstones and shales of the upper Crackington Formation. They are probably of late Namurian age, although there is no direct biostratigraphical control here. The site is mentioned briefly by Thomas (1982).

Description

This is a typical exposure of sandstones of the upper Crackington Formation. The sandstones are medium to dark grey, fine-grained and with some interbedded siltstones and shales. The sandstone beds vary from a few centimetres to 2 m in thickness, the thicker ones being near the base of the section.

Excellent examples of ripple marks, flute marks and squamiform load structures can be seen here. Horizontal burrows have been observed, meandering along the troughs of the ripple marks, and occasionally transgressing the intervening crests. It is not certain what type of animal produced such burrows.

Interpretation

This is a key inland site for sedimentological studies on the Crackington Formation. The sedimentary structures shown here, especially the flute marks, are typical of turbidites and are amongst the best examples of such structures of any age known in Britain.

Conclusions

Bickleigh Wood Quarry is the best site for investigating the sandstones of the Crackington Formation. These sandstones represent sands deposited about 320 million years ago in deep marine conditions. These currents show a number of distinctive structures that indicate that the sands had been transported there by underwater currents known as turbidity currents. They result from seismic shocks or other earth-movements disturbing unstable piles of sediment in shallow marine settings (e.g. river-delta fronts), causing them to flow into deeper water. This is one of the best examples of any age in Britain of such turbidity deposits.

[References](#)