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# Alveley Grindstone Quarry

## Highlights

Alveley Grindstone Quarry is the best exposure of alluvial sandstones of the 'Keele Beds' in the English Midlands, and has provided some limited biostratigraphical evidence.

## Introduction

This is a disused quarry [SO 758 848] in the Wyre Forest, about 0.5 km NNW of the village of Alveley, 8 km SE of Bridgnorth, which has been worked in the past for building stone. Although abandoned in the 1930s, there is still good exposure here of 'Keele Beds' red sandstones. The site is mentioned in passing by Kidston *et al.* (1917) and is briefly described by Whitehead and Pocock (1947). The latter also provide a photograph of the quarry on their plate 5, evidently a short time after it was abandoned.

## Description

The exposed sequence here consists of about 10 m of massive red and green sandstones, known locally as the Alveley Grindstones (Figure 7.17). The sandstones are trough cross-bedded and are probably channel deposits. Some of the channels have a diaper of finer sediment.

The finer-grained deposits look promising from a palaeontological view, although they yielded nothing during the GCR survey of the site, or on subsequent visits. Pringle *in* Kidston *et al.* (1917) is reported to have found a *Sigillaria* here, but this is of little biostratigraphical significance.

At nearby Butts Quarry, sandstones from a slightly lower stratigraphical level, towards the base of the 'Keele Beds', yielded a number of amphibian footprints (Raw *in* Whitehead and Pocock, 1947). These have been taken to indicate a mid-Stephanian age for these beds (Haubold and Sarjeant, 1973). As pointed out by Besly (1988), however, the biostratigraphical worth of such trace fossils is far from proved. Work currently in progress by Besly and Cleal is indicating a late Westphalian D or Cantabrian age.

## Interpretation

This is the best of the quarries in the Alveley district, exposing the so-called 'Keele Beds' of the Wyre Forest Coalfield (see report on Cheswardine Canal Cutting for brief comments on the nomenclatural problems surrounding this formation). The exposed beds are part of an extensive fluvial system, that extended southwards across central and northern England from positive areas such as the Mid-North Sea High, Southern Uplands and Grampian Uplands (Besly, 1988). It contrasts with the underlying Halesowen Formation, which has a southern provenance, and which seems to be a northern extension of the Forest of Dean Pennant Formation.

## Conclusions

Alveley Grindstone Quarry is the best exposure of red sandstones known as the 'Keele Beds', which are about 300 million years old. The red coloration is thought to have been due to a low water table at that time, reflecting the general uplift of the English Midlands at this time.

## [References](#)



*(Figure 7.17) Sandstones known as the 'Keele Formation' exposed at Alveley Grindstone Quarry. (Photo: C.J. Cleal.)*