CYNGOR CEFN GWLAD CYMRU COUNTRYSIDE COUNCIL FOR WALES

SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

POWYS DOLYHIR QUARRY

<u>Date of Notification:</u> 1954, 1980, 1984, 1990

National Grid Reference: SO 241581

O.S. Maps: 1:50,000 Sheet number: 148

1:25,000 Sheet number: SO 25

Site Area: 44.7 ha

Description:

The rocks in this working quarry display spectacular exposures of Longmyndian clastic sediments overlain unconformably by Silurian limestone. These Longmyndian rocks represent the most southerly continuation of the basement in the Church Stretton fault complex, and provide one of the clearest exposures of cover-basement relationships along the entire eastern margin of the Welsh Basin. Like their correlatives in the Longmynd site further north, these exposures preserve one of the few records of early sedimentation upon the young, sialic crustal block of southern Britain at the end of the Precambrian. The site also provides outstanding sections of Silurian Dolyhir Limestone, resting with spectacular unconformity on Precambrian sediments. The Dolyhir Limestone, seen only in this area, was a very localised development formed on an elevated portion of Silurian seabed within the Church Stretton Fault Belt. In this belt the normally thick Ordovician and lower Silurian succession is totally absent, with consequent juxtaposition of Wenlock and much older Precambrian strata. Apart from the great palaeogeographical significance of Dolyhir Limestone its faunas and floras are remarkably rich, consisting of abundant calcareous algae and shelly faunas, some elements of which are endemic to this limestone development.

In layman's terms, the interest of this site may be expressed more simply, and such a statement is provided below. This should not be taken as definitive and further information as to details of the interest can be obtained from the Countryside Council for Wales.

Dolyhir Quarry exposes one of the best sections through the geological basement of Britain. The Precambrian rocks seen here represent the crust of the Earth as it existed over 600 million years ago, but are rarely seen in England and Wales due to the cover of sedimentary rocks deposited in more recent geological times. The Wenlock Limestones which overlie the Precambrian rocks are also of interest mainly because of the range of fossils which they have yielded. Of particular interest, however, is the fact that the thick

sequence of Ordovician and early Silurian strata which normally intervene between the Precambrian and Wenlock Limestones is absent at Dolyhir, due mainly to the fact that the site is thought to lie near the termination of a complex fault which was active during Ordovician and early Silurian times.

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