

Site Name: Llanymynech Rocks

Grid Reference: SJ 224217

RIGS Category: Scientific

Earth Science Category: Upper Palaeozoic Stratigraphy

Geology 1:50,000:

RIGS Statement of Interest:

Llanymynech rocks are of regional geological importance because they are the only exposure of the Dinantian age rocks in Powys. This site comprises a prominent limestone escarpment that overlooks the village of Llanymynech.

The exposure consists of a series of quarries to the south and east of the hill. This is the longest lateral exposure of the Carboniferous Limestone south of the Eglwyseg Escarpment near Llangollen.

Exposed in the of the main quarry, known as the Amphitheatre, are the purple, fine-grained Basement Beds and the lower beds of the Clwyd Limestone Group including the Leete and Loggerheads Formations. There are also excellent examples of undulating, sharp contacts between the purple Basement Beds, grey limestone and mudstone; excellent sedimentary structures in the cliff faces and abundant shelly fossils.

The cliffs on the south eastern side of the site contain an exceptional 3D exposure of cross-bedding and a large ovoid concretion.

The Leete Limestone Formation is a thin- to thick-bedded heterolithic (different grains) formation. The cliffs include the upper 65m of the formation. Generally the formation consists of porcellaneous (porcelain-like) limestones, which are white weathering, and darker muddy limestones. Fossils include marine animals such as brachiopods, crinoids and corals. The Loggerheads Formation seen towards the top of the cliffs and consists of pale thick-bedded limestone with shells and corals. The fossiliferous beds are interbedded with dark mudstones.

Surveyed by: W.R. Fitches & J. Malpas