Site Name: Llandegley Rocks Grid Reference: SO 1275 6135

RIGS Category: Educational & Scientific

Earth Science Category: Ordovician (Llanvirn) Stratigraphy, Igneous Geology

Geology 1:50,000: BGS Sheet 180, Knighton (not yet mapped)

RIGS Statement of Interest:

This RIGS consists of a number of individual outcrops that combine to show a good sequence through the Llandegley Tuffs and the lower part of the Builth Volcanic Group, including several fossiliferous localities. There are good viewpoints showing the structure of the sequence across Llandegley Rocks, and the effects of underlying geology on topography. It is a remarkable set of exposures, including good outcrops of the Llandrindod Tuff Formation with pyroclastic (explosive volcanic) textures and secondary hydrothermal metamorphism (alteration by hot water circulation), keratophyric lavas) with flow banding, coarse ashes of the Llandegley Tuffs, a problematic reworked volcaniclastic unit known informally as the laminated ashes, and fossiliferous sandstones at two levels. The upper of these fossiliferous sites (SW ridge), in the lower part of the Gilwern Volcanic Formation, is of substantial international interest. This site preserves a diverse fauna of articulated echinoderms and sponges, a unique occurrence from a nearshore, coarse sand environment of Early Palaeozoic age. The contrast between the two completely different shelly faunas either side of the Llandrindod Tuff Formation suggests the eradication of the earlier fauna and immigration of the later, revealing an unusually interesting ecological history.

Surveyed by: J. P. Botting & W.R. Fitches