



## South Wales RIGS Group Site Record

### RIGS Description

**SECTION A**

General	South Wales
<b>Site Name:</b> Farm 10 (Cae'r-mynach) cutting	<b>File Number:</b> Site_RAW_JRD_60
<b>RIGS Number:</b> 717	<b>Surveyed by:</b> R A Waters and J R Davies
<b>Grid Reference:</b> SN 9790 4693	<b>Date of Visit:</b> 7 <sup>th</sup> February 2011
<b>RIGS Category:</b> Scientific	<b>Date Registered:</b> <b>Owner:</b> Ministry of Defence/ Army/ SENTA
<b>Earth Science Category:</b> stratigraphical, sedimentological	<b>Planning Authority:</b> Powys County Council
<b>Site Nature:</b> Cutting	<b>Documentation prepared by:</b> R A Waters
<b>Unitary Authority:</b> Powys County Council	<b>Documentation last revised:</b> 8 <sup>th</sup> March 2012
<b>OS 1:50,000 Sheet:</b> 147	<b>Photographic Record:</b> Attached
<b>OS 1:25,000 Explorer Sheet:</b> 188	
<b>BGS 1:50,000 Sheet:</b> E196	
<p><b>RIGS Statement of Interest:</b></p> <p>Farm 10 (Cae'r-mynach) cutting is part of a network of sites demonstrating the evolution of the south-east margin of the Lower Palaeozoic Welsh Basin during the mid to late Silurian. It has been proposed a RIGS as the cutting is the type section for the Cae'r mynach Formation of latest Ludlow age. Although it is situated on the MOD Sennybridge Training Area (SENTA), where access is restricted, it is considered a key site for interpreting the stratigraphy, sedimentology and palaeontology of this time interval. Furthermore, sections in the Cae'r mynach Formation are not common in this area. It complements the nearby, well documented Cwm Graig ddu road section RIGS that demonstrates the underlying Ludlow age stratigraphy.</p> <p>It shows a small section in the lower part of the Cae'r mynach Formation in which key sedimentary structures, such as wave generated ripple marks and hummocky cross stratification, enable the depositional environment to be elucidated as a shallow shelf sea dominated by storms and wave action.</p> <p>The site provides a key section for those interested in scientific research into the stratigraphy, palaeontology and sedimentology of the latest Ludlow. It is not considered suitable for students because of its location on SENTA.</p>	

**Geological setting/context:**

Farm 10 (Cae'r-mynach) cutting is a 4 m thick section in the lower part of the latest Ludlow, Cae'r mynach Formation on the MOD Sennybridge Training Area (British Geological Survey 2005). The section is the type locality for the formation, being named after Cae' r-mynach farm, 550 m to the ENE.

The section comprises fine-grained sheet sandstones, up to 0.3 m thick, interbedded with variably bioturbated thin bedded siltstones, sandstones and mudstones. The sheet sandstones exhibit HCS and wave ripples. Scattered brachiopods and crinoid debris are locally present.

The sheet sandstones represent storm event beds on a wave dominated shelf and were deposited between fair weather and storm wave base. The formation represents the upper part of the late Ludlow progradation, the acme being recorded by the overlying Tilestones, seen in tilestone workings 850 m to the south west (Schofield et al. 2004).

Sections in the Cae'r mynach Formation are not common and this site provides data on the latest Ludlow that is not exposed in the well documented Cwm Graig ddu road section (Straw 1953; Bassett 1993) that is present 1.5 km to the west and spans most of the Ludlow succession.

**References:**

BASSETT, M G. 1993. The Silurian of the Newbridge-Built-Eppynt area. 281-300 in *Geological Excursions in Powys*. WOODCOCK, N H and BASSETT, M G. (editors) (Cardiff: University of Wales Press, National Museum of Wales)

British Geological Survey. 2005. *Builth Wells. England and Wales Sheet 196, Solid geology, 1: 50 000*. British Geological Survey: Nottingham

SCHOFIELD, D I, DAVIES, J R, WATERS, R A, WILBY, P R, WILLIAMS, M and WILSON, D. 2004. Geology of the Builth Wells District – a brief explanation of the geological map. *Sheet Explanation of the British Geological Survey. 1:50 000 Sheet 196 Builth Wells (England and Wales)*.

STRAW, S.H, 1953. The Silurian succession at Cwm Craig Ddu (Breconshire). *Liverpool and Manchester Geological Journal*. Vol. 1, 208-19.

**SECTION B****PRACTICAL CONSIDERATIONS:**

Please score Accessibility and Safety Red Amber or Green

**Accessibility:**

X

Comment: Site is on the MOD Sennybridge Training Area (SENTA) and in one of the Dry training areas, which is not subject to live firing. Access is only available with SENTA permission.

**Safety:**

X

Comment: Access only allowed after MOD safety briefing

**Conservation status:**

Not known

**OWNERSHIP/PLANNING CONTROL:**

**Owner/tenant:** Ministry of Defence/Army/SENTA

**Planning Authority:** Powys County Council

**Planning status/constraints/opportunities:**

There are no known planning constraints or opportunities

**CONDITION, USE & MANAGEMENT:**

**Present use:** MOD Farm 10 is a group of purpose built buildings used for troop accommodation and storing vehicles. The cutting is at the back of a vehicle storage A-frame shed.

**Site condition:** Sloping cutting that is degraded in part but enough rock is exposed to see the key features of the formation. Juncus rush is beginning to grow on the cutting in places.

**Potential threats:** The cutting is sparsely vegetated at present but this may change and further soil wash may obscure more of the rock faces.

**Site Management:** Juncus rush and excess soil wash should be removed periodically.

**SITE DEVELOPMENT:****Potential use (general):**

**Potential use (educational):** The site provides a key section for those interested in scientific research into the stratigraphy, palaeontology and sedimentology of the latest Ludlow. It is not considered suitable for students because of its location on SENTA.

**Other comments:**

## Photographic Record



General view of cutting.





Sandstone sheets with HCS, interbedded with mudstones and siltstones.





Detail of HCS in sheet sandstone