



South Wales RIGS Group Site Record RIGS Description

SECTION A

General	South Wales
Site Name: Glascoed	File Number: Site_232_04
RIGS Number: 698	Surveyed by: Rhian Kendall
Grid Reference: SO 3393 0210	Date of Visit: 17 th July 2010
RIGS Category: Stratigraphic, Educational	Date Registered:
Earth Science Category: Palaeontological, stratigraphic	
Site Nature: Disused Railway Cutting	Owner: Unknown Planning Authority: Monmouthshire County Council
Unitary Authority: Monmouthshire County Council	Documentation prepared by: Rhian Kendall
OS 1:50,000 Sheet: 171	Documentation last revised: 7 th March 2012
OS 1:25,000 Explorer Sheet: 152	Photographic Record:
BGS 1:50,000 Sheet: E232	
RIGS Statement of Interest:	
<p>This RIGS is to be found in the bank of a disused railway cutting close to the outer carpark for the Royal Ordnance Factory at Glascoed. The site exposes the Glascoed Mudstone Formation which is the oldest rock unit, exposed in the Usk Inlier. These rocks are found here because of their position at the eroded core of the Usk pericline.</p> <p>Although, now very overgrown, this section is important as it is the stratotype for the Glascoed Mudstone Formation. Stratotypes are specific sections of rock which are chosen as the standard places to examine the characteristics of a particular rock formation.</p> <p>The Glascoed Mudstone Formation is very fossiliferous and which makes this RIGS important for the study of fossils. The abundance of fossils at this site, could with site clearance, make it a good place for inspiring people to study geology and so it is educationally important.</p>	

Geological setting/context:

This locality is the bank of a disused railway cutting close to the outer carpark for the Royal Ordnance Factory at Glascoed. Prior permission MUST be sought to access this site.

The oldest exposed rocks in the Usk Inlier are to be found at this locality. These are the Glascoed Mudstone Formation, formerly known as the Wenlock Shale which is equivalent to the upper part of the Coalbrookdale Formation of the Welsh Borders. It is exposed here because of its position at the eroded core of the Usk pericline.

The Glascoed Mudstone Formation is at least 220m thick in the Usk inlier. It is fossiliferous, soft, pale olive, calcareous mudstones and shales with nodules of limestone. The beds grade upwards into micaceous sandy beds, forming slightly higher ground.

The Glascoed Mudstone Formation is very fossiliferous, containing mainly brachiopods. Common fossils include: *Cyrtia exporrecta*, *Protomegastrophia*, *Atrypa reticularis*, *Leptaena depressa*, *Meristina obtusa* and *Eoplectodonta duvalii* (Walmsley 1982). The solitary coral *Ketophyllum* is locally common and trilobites are also known from this locality. These include: *Cyphloproetus depressus*, *Dalmanites* and *Encrinurus*. The graptolite *Monograptus flemingii flemingii* is also found here. The abundance and diversity of benthic faunas found in the Glascoed Mudstone Formation indicate that the sediments were deposited in a mid shelf, shallow marine environment.

Although, now very overgrown, this section is important as it is the stratotype for the Glascoed Mudstone Formation. The abundance of fossils at this site makes it educationally useful.

References:

BARCLAY, W J, 1989. Geology of the South Wales Coalfield, Part II, the country around Abergavenny. Memoir of the British Geological Survey, Sheet 232, (England and Wales).

SQUIRRELL, H C and DOWNING, R A. 1969. Geology of the South Wales Coalfield, Part I, the country around Newport (Mon), British Geological Survey, Sheet 249 (third edition)

WALMSLEY, V G. 1982. In: The Silurian inliers of the south-eastern Welsh Borderland. Lawson, J D, Curtis, M L K, Squirrell, H C, Tucker, E V and Walmsley, V G. Geologists' Association Guide No. 5.

SECTION B

PRACTICAL CONSIDERATIONS:

Please score Accessibility and Safety Red Amber or Green

Accessibility:

X

Comment: Permission must be sought before accessing this site

Safety:

X

Comment: Site is overgrown

Conservation status:

There are no known conservation designations of this RIGS

OWNERSHIP/PLANNING CONTROL:

Owner/tenant: Unknown

Planning Authority: Monmouthshire County Council

Planning status/constraints/opportunities:

There are no known planning constraints or opportunities

CONDITION, USE & MANAGEMENT:

Present use: None

Site condition: Poor

Potential threats: Encroachment of vegetation.

Site Management: It is recommended that this site be cleared of vegetation and perhaps a path through the undergrowth to facilitate access

SITE DEVELOPMENT:

Potential use (general):

Potential use (educational): This site is potentially very useful as an educational resource. The prolific fossils capture the imagination and encourage a desire to learn about geology. The site would greatly benefit from site clearance and interpretation boards.

Other comments:

Photographic Record

None – permission refused to visit the site

Annotated Sketch