

# South Wales RIGS Group Site Record RIGS Description

General	South Wales		
Site Name: Maes-y-ffin Cwm	File Number: AB_45		
RIGS Number: 723	Surveyed by: A Bowring / D Jarman		
Grid Reference: SO 25450 30760	Date of Visit: 9 February 2011		
RIGS Category: Scientific	Date Registered:		
Earth Science Category:	Unknown		
Geomorphological			
<b>Site Nature:</b> Pasture farmland and rough grazing	<b>Documentation prepared by:</b> Adrian Humpage		
Unitary Authority: Monmouthshire CC	Documentation last revised: 19 August 2011		
<b>OS 1:50,000</b> Sheet: 161	Photographic Record: See images attached to this report		
OS 1:25,000 Explorer Sheet: OL 13			
BGS 1:50,000 Sheet: 214 (Talgarth)			

**RIGS Statement of Interest**: This site forms part of a network of important scientific sites within the South Wales RIGS area associated with glacial and periglacial processes.

Maes-y-ffin is a shallow cirque like feature on the north-east facing hillslope to the west of Cael-y-ffin in the Black Mountains. At its foot, is a small continuous rampart. Its exact mode of formation is uncertain, and it has variously been described as a small glacial cirque (Lewis and Thomas 2005) and as a glacially reworked rock-slope failure (Jarman pers comm).

It is unlikely that a cirque glacier would have evolved here of its own accord – although the slope of Tarren-y-escob is in the lee of the prevailing winds, there is no evidence of cirque formation in similar situations elsewhere in the Black Mountains, or of the development of a valley glacier system. However, there is abundant evidence for mass-movement and below the feature landslide deposits have been mapped (BGS 2004).

However, as there is now increasing evidence to suggest that the Black Mountains were not glaciated during the late Devensian, this feature is considered to be a nival feature formed by a perennial snowpatch during the last ice age, the moraine-like feature at the foot is here interpreted as being a pro-talus rampart.

### Geological setting/context:

The landscape evolution history of the Black Mountains is not well understood, as although extensive glacial deposits have been mapped in the dip-slope valleys of the Honddu, Grwyne Fawr and Grwyne Fechan (BGS 2004), there is no evidence of mid-Wales ice incursion over the northern escarpment of the Black Mountains, or conclusive evidence of glaciation of the Black Mountains during the last (Devensian) Ice Age, although Lewis and Thomas (2005) reported kame topography around Llanbedr in the Grwyne Fechan and glacial deposits were mapped on the basis of an aerial photograph interpretation reconnaissance survey in 2002 (BGS 2004).

Lewis and Thomas (2005) argued that it was glacial oversteepening of the valley sides which resulted in instability giving rise to the proliferation of large landslides in the Honddu valley and some of its tributaries, however recent work (Thomas and Humpage 2007; Humpage in prep) has begun to cast doubt on the glaciation of the Black Mountains during the Late Devensian, although it is acknowledged that the area was probably over-ridden by ice during earlier glacial stadials.

### References:

British Geological Survey (2004). *Talgarth. England and Wales Sheet 214.Solid and Drift Geology. 1:50,000.* British Geological Survey, Keyworth, Nottingham.

Humpage, A.J. (in prep). *Geological Assessment of Llanvihangel Crucorney Moraine SSSI*. BGS Commissioned Report.

Lewis, C.A. and Thomas, G.S.P. (2005) The Upper Wye and Usk Regions. In: CA Lewis and A.E. Richards (Eds). *The Glaciations of Wales and Adjacent Regions*. Logaston Press, Logaston, Herefordshire.

Thomas, G.S.P. and Humpage, A.J. (2007). Llanvihangel Crucorney, In: S.J. Carr, C.G. Coleman, A.J. Humpage and R.A. Shakesby (Eds). *Quaternary of the Brecon Beacons: Field Guide*. Quaternary Research Association, London.

#### **SECTION B**

PRACTICAL CONSIDERATIONS: Please score Accessibility and Safety Red Amber or Green				
Accessibility:			X	
Comment: Accessible where crossed by public rights of way allowing features to be viewed. Otherwise, permission will be required.				
Safety:		X		
Comment: Farmland and rough grazing. Backwall may be prone to occasional rockfalls.				
Conservation status:				
Upper part of Maes-y-ffin including the backwall of the cwm is within the Black Mountains SSSI, otherwise there are no known conservation designations on this RIGS.				

#### OWNERSHIP/PLANNING CONTROL:

**Owner/tenant**: Unknown / various including BBNPA

Planning Authority: Brecon Beacons National Park Authority

**Planning status/constraints/opportunities**: There are no known planning constraints or opportunities

#### CONDITION, USE & MANAGEMENT:

Present use: Farmland

Site condition: Mainly open pastureland/ rough grazing

Potential threats: None known at present

Site Management:

#### SITE DEVELOPMENT:

**Potential use (general)**: detailed scientific research and geomorphological mapping, would benefit this site

Potential use (educational): Good site to view non-glacial nival processes

Other comments:

# Photographic Record



Meas-y-ffin Cwm looking south-west showing the backwall and low rampart at its foot (photograph D. Jarman)