

South Wales RIGS Group Site Record RIGS Description

SECTION A

General	South Wales		
Site Name: Craig Ogwr Tors	File Number: AH_62		
RIGS Number: 747	Surveyed by: AJ Humpage		
Grid Reference: SS 93200 94900	Date of Visit: 28 September 2011		
RIGS Category: Scientific, Aesthetic	Date Registered:		
Earth Science Category:	Unknown		
Geomorphological			
Site Nature: Exposure	Documentation prepared by: AJH		
Unitary Authority: Bridgend CBC	Documentation last revised: 28 September 2011		
OS 1:50,000 Sheet: 170	Photographic Record:		
	See images attached to this report		
OS 1:25,000 Explorer Sheet: 166			
BGS 1:50,000 Sheet: 248 (Pontypridd)			

RIGS Statement of Interest: This site forms part of a network of important scientific sites within the South Wales RIGS area that records the influence of cold climates beyond the glacial limit

Craig Ogwr is a well-developed south facing slope at the head of the Ogwr Fawr valley with stunning views along the scarp and downvalley towards Nantymoel. Probably initiated by glacial activity, its south facing aspect may not have promoted the long term development and survival of glacial conditions, and the face may have been subjected to a long period of periglacial activity. Well developed scarp edge and valley side tors in thickly bedded coarse sandstones are visible above well-developed talus slopes. Lower on the valley sides is evidence of large-scale mass movement processes which are causing the main A4061 to suffer subsidence.

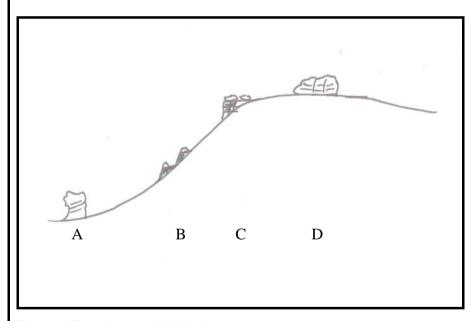
The tors are developed in Carboniferous age thickly bedded sandstones of the Rhondda Member, part of the Pennant Sandstone Formation. The lower part of the slope is within the interbedded mudstones, siltstones and sandstones of the underlying Llynfi Mmeber, again of the Pennant Sandstone Formation.

Geological setting/context:

The Craig Ogwr Tors are a exposed and weathered South facing high cliff face of Pennant sandstone, typical of scarp-edge tor (see below) formation formed under a single cycle of periglacial denudation as suggested by Palmer et al (1961, 1962) from work in the Pennines and Dartmoor. Palmer argued that tors are the product of a single phase of weathering involving macrogelivation of bedrock and subsequent removal by solifluction of the resultant weathered material. His work showed that tors were often associated with blockfields and solifluction debris below the exposed faces, and that there was little evidence of deep weathering, as suggested by Linton (1955). Joint spacing is the critical factor in preserving rock residuals.

Tors can be subdivided into four distinct groups:

- Summit Tors characterised by the classic examples on Dartmoor, such as Hay Tor and Hound Tor
- 2) **Scarp-edge Tors** found at the break of slope between plateau surfaces and valley sides
- 3) **Valley-side Tors** are generally less impressive, and usually mark an outcrop of resistant rock on the valley side
- 4) **Lowland Tors** are relatively uncommon, but are again a consequence of more resistant rock standing proud of the surrounding surface.



Types of Tors observed in Britain

A: lowland tors B: valley-side tors C: scarp edge tors D: summit tors

Valley side tors are visible south of the A4061 road on the south west facing Craig y Geifr.

Although spectacular, there is little reference to these tors other than passing mention in Bowen (1970)

References:

Bowen, D.Q. (1970). South-east and Central South Wales. In: C.A. Lewis (Ed.). *The Glaciations of Wales and Adjoining Regions*. Longman, London. 378pp.

Linton, D.L. (1955). The problem of tors. Geographical Journal, 121, 470-487.

Palmer, J. and Radley, J. (1961). Gritstone tors of the English Pennines. *Zeitschrift fur Geomorphologie*, **5**, 37-52 (see especially p. 37-41).

Palmer, J. and Neilson, R. (1962). The origin of granite tors on Dartmoor, Devonshire. *Proceedings of the Yorkshire Geological Society*, **33**, 315-340 (see especially p. 325-329).

SECTION B

PRACTICAL CONSIDERATIONS:							
Please score Accessibility and Safety Red Amber or Green							
Accessibility:			X				
Comment: Easily accessible from A4061 carpark.							
Safety:		X					
Do not stand too close to tor edges. Steep grassy slopes which may be slippery							
Conservation status:							

OWNERSHIP/PLANNING CONTROL:

Owner/tenant: Unknown

Planning Authority: Bridgend County Borough Council

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

constraints or opportunities

CONDITION, USE & MANAGEMENT:

Present use: Open upland

Site condition: Generally good.

Potential threats: Modification to slopes to maintain the road.

Site Management:

SITE DEVELOPMENT:

Potential use (general): A good site to explain periglacial processes.

Potential use (educational): Good accessible site.

Other comments:			

Photographic Record



View west along scarp showing Craig Ogwr tors at head of Ogwr Fawr valley



View NE looking across main road. Note talus slope below Pennant sandstone tors



Area of landsliding in middle foreground along lower road



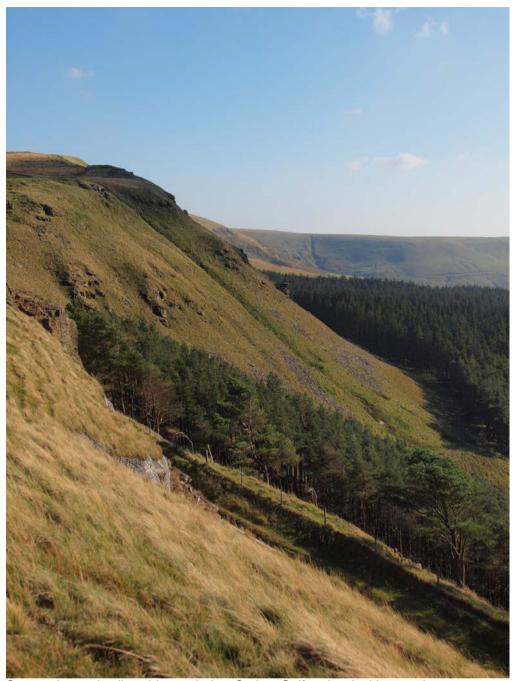
Craig Ogwr looking North east



Scarp edge tor form at eastern end of Craig Ogwr



View looking west. Landslide on left side of photograph



Scarp edge and valley side tors below Craig y Geifr - view looking south-east.



View south down Ogwr Fawr.



Scarp edge tor feature



Jointed and periglacially weathered and rounded scarp edge tor (figure for scale)