

**CYNGOR CEFN GWLAD CYMRU
COUNTRYSIDE COUNCIL FOR WALES**

SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

**POWYS
BLAENAU GWENT**

MYNYDD LLANGYNIDR

Date of Notification: 23 August 2012

National Grid Reference: SO140150

O.S. Maps: 1:50,000 Sheet number: 161
1:10,000 Sheet number: SO11NE, SO11NW, SO11SE, SO11SW

Site Area: 896.80 ha

Description:

Mynydd Llangynidr is of special interest for the karstic geomorphology, particularly the doline field, that is evident as a series of depressions of varying size and depth across the moorland surface. The site is situated approximately 1km north of the village of Trefil on a relatively flat area of moorland which ranges from 460m above sea-level by the B4560 road in the east, to 557m above sea-level near Chartist Cave in the west.

The northern edge of the South Wales Coalfield provides the best British example of an interstratal karst, extending from Black Mountain in the west to the Blorenge in the east. Within this area Mynydd Llangynidr is exceptional for the morphological variety and density of caprock dolines while also containing shallow subsidence depressions and foundered rock masses of varying topographical form.

The site covers the summit area and upper dipslopes of Mynydd Llangynidr, where the solid outcrop is dominantly the Twrch Sandstone Formation, locally the base of the Marros Group of Namurian age and informally referred to as the 'Millstone Grit'. The Twrch Sandstone Formation is underlain by the Dowlais Limestone Formation, locally the top of the Pembroke Limestone Group (informally referred to as the 'Carboniferous Limestone') but there is an unconformity that covers several million years between the two formations. To the north of the site the Carboniferous Limestone forms an escarpment that overlooks the Usk Valley.

The site includes a densely packed doline field that clearly demonstrates how subsurface interstratal karst solution can induce collapse, pitting and foundering in the overlying non-carbonate outcrop. Although broadly classified as caprock dolines there is an array of depression morphologies ranging from shallow-sided forms that commonly contain permanent or ephemeral water bodies through to deep, steep-sided depressions. Some of the caprock dolines appear to have captured small surface streams and function as sinks and there are also unusual dolines developed entirely in grit boulder fields. In addition to surface landforms, Ogof Cynnes, Chartist Cave and Crescent Cave are of particular importance as they allow the interface between the grit

and the limestone to be viewed in greater detail from underground, and provide further insights into the development of interstratal karst.

Mynydd Llangynidr is of international importance and provides tremendous potential for future research into caprock doline morphology and interstratal karst development.

Remarks:

Mynydd Llangynidr has been selected as a result of the former Nature Conservancy Council's Geological Conservation Review (GCR), a national survey and evaluation of sites of geological and geomorphological interest. The geological feature of interest at Mynydd Llangynidr is described in the GCR volume entitled *Karst and Caves of Great Britain* (Waltham, A.C., Simms, M.J., Farrant, A.R. & Goldie, H.S., 1997).

The Mynydd Llangynidr GCR (as revised in 2012) extends into Mynydd Llangatwg SSSI east of the B4560 road.

The Powys part of the site lies within the Brecon Beacons National Park.

MYNYDD LLANGYNIDR

Powys
Blaenau Gwent

Map 1 / 1

Site o Ddiddordeb Gyffwrddol Arbenig
Site of Special Scientific Interest

1:20,000
Graddfa
Scale

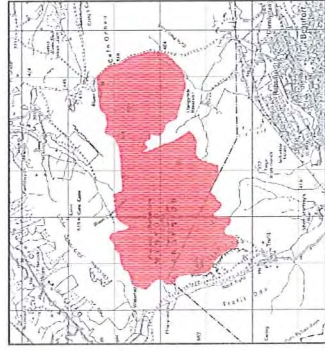
856.80 ha
Arwynebedd
Area

29/06/2012
Hysbyswyd
Notified

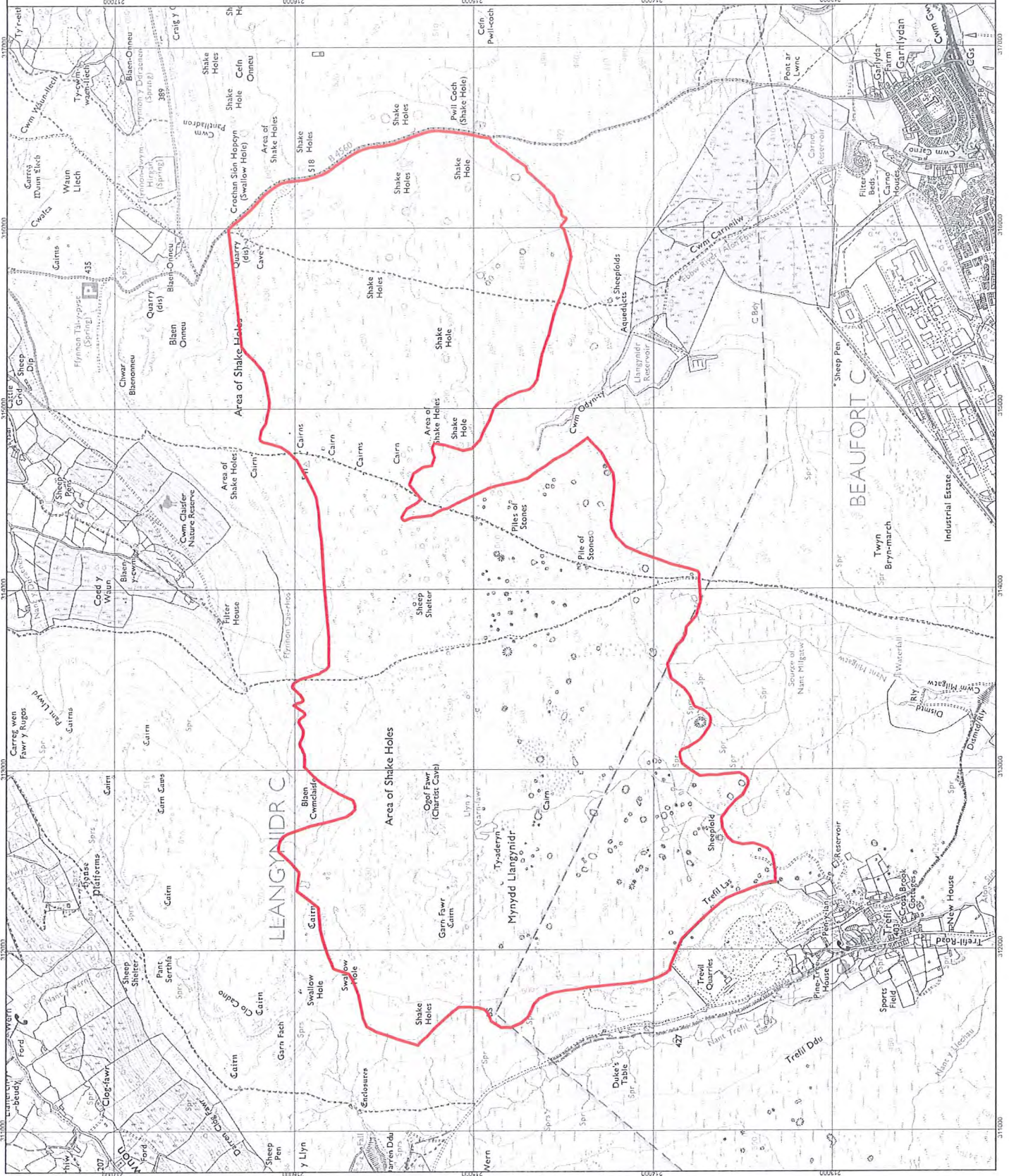
Cadarniad
Confirmation

3159
Rhif y safle
Site Id

Nodyn: Data wedi ei gipio ar raddfa 1:2,500 a'i lleihau i raddfa
1:20,000.
Note: data captured at 1:2,500 scale and reduced to
1:20,000.



Arwyddwedd o'r Cymdeithas Sioe'r Ffynon a'r Cwmwl yn Cymru
Arwyddwedd o'r Cymdeithas Sioe'r Ffynon a'r Cwmwl yn Cymru
Cymru 100019741 2011.
Mae'r Cymdeithas Sioe'r Ffynon a'r Cwmwl yn Cymru yn
Cofrestru'r Safon uchaf o'r Safon uchaf o'r Safon uchaf o'r Safon
Countryside Council for Wales License No. 100019741 2011.



CYNGOR CEFN GWLAD CYMRU
COUNTRYSIDE COUNCIL FOR WALES

SITE OF SPECIAL SCIENTIFIC INTEREST: OPERATIONS REQUIRING
CONSULTATION WITH THE COUNTRYSIDE COUNCIL FOR WALES (CCW)

SITE NAME: MYNYDD LLANGYNIDR

UNITARY AUTHORITY: POWYS (BRECON BEACONS NATIONAL PARK)
BLAENAU GWENT

DATE OF NOTIFICATION: 23 AUGUST 2012

The operations listed below may damage the features of interest of Mynydd Llangynidr SSSI. Before any of these operations are undertaken you must consult CCW, and may require our consent. **The list of operations is not a prohibited list.**

It is usually possible to carry out some of these operations in certain ways, or at specific times of year, or on certain parts of the SSSI, without damaging the features of interest. If you wish to carry out any of these activities please contact the local office of CCW. A Conservation Officer will give you advice and where appropriate issue consent. Please help us by using the enclosed form to ask us for consent to carry out these operations.

In certain circumstances it will not be possible to consent these operations, because they would damage the features of interest. Where possible the Conservation Officer will suggest alternative ways in which you may proceed, which would enable consent to be issued. To proceed without CCW's consent may constitute an offence. **If consent is refused, or conditions attached to it, which are not acceptable to you, you will be provided with details of how you may appeal to the Welsh Government.**

<u>Ref No</u>	<u>Type of operation</u>
7.	Dumping, spreading or discharging of any materials.
12.	The introduction of tree and/or woodland management and alterations to tree and/or woodland management including planting, felling, thinning and coppicing.
13a.	Drainage including moor-gripping, the use of mole, tile, tunnel or other artificial drains.
13b.	Modification to the structure of water courses including rivers, streams, springs, ditches, dykes, drains, including their banks and beds, as by re-alignment, regrading, damming or dredging.
14.	Alterations to water levels and tables and water utilisation including irrigation, storage and abstraction from existing water bodies and through boreholes.
15.	Infilling or digging of ditches, drains, ponds, pools, marshes, quarries or pits.
20.	Extraction of minerals including peat, hard rock, sand and gravel, topsoil, subsoil, lime, limestone pavement and spoil.
21.	Destruction, construction, removal, re-routing, or re-grading of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks, including soil and rock exposures.

22. Storage of materials.
23. Erection of permanent or temporary structures or the undertaking of engineering works, including drilling or the laying, maintenance or removal of pipelines and cables, above or below ground.
24. Modification of natural or man-made features (including cave entrances) and clearance of boulders, large stones, loose rock or scree and the battering, buttressing or grading of geological exposures and cuttings (rock and soil) and infilling of pits and quarries.
26. Use of vehicles likely to damage the geomorphological features.
27. Recreational activities likely to damage the geomorphological features.

Notes:

- i. This is a list of operations appearing to the CCW to be likely to damage the special features of this SSSI, as required under section 28(4)(b) of the Wildlife and Countryside Act 1981 as substituted by Schedule 9 to the Countryside and Rights of Way Act 2000.
- ii. Where an operation has been granted a consent, licence or permission from another authority separate consent will not normally be required from CCW, however you should always give notice to CCW prior to exercising such consent, licence or permission.

MYNYDD LLANGYNIDR SITE OF SPECIAL SCIENTIFIC INTEREST



The site boundary shown above is indicative and for illustration purposes only.

Aerial Photograph ©: This orthophotography has been produced by COWI A/S from digital photography captured by them in 2006. Licensed by the Welsh Government's Department for Environment, Planning and Countryside.

YOUR SPECIAL SITE AND ITS FUTURE

‘Your Special Site and its Future’ is part of our commitment to improve the way we work with Site of Special Scientific Interest (SSSI) owners and occupiers. In it, we explain what is special about the geology on your site, and what care is needed to look after its geology into the future.

All SSSIs are considered to be of national importance and we recognise the crucial role that owners and occupiers play in their management and protection. We need you to share your views and knowledge of this site with us, to help safeguard it.

We hope that you will find ‘Your Special Site and its Future’ interesting and helpful. Please contact us if there is anything about the site and its management that you would like to discuss.

What is 'special' about the geomorphology at Mynydd Llangynidr SSSI?

The site has one special feature:

- **Karst geomorphology, in particular the doline field that is evident as a series of depressions of varying size and depth across the moorland surface.**

What do we want Mynydd Llangynidr SSSI to look like?

The following is a description of how we would like to see the feature at Mynydd Llangynidr:

Our long-term aims for this site will be focussed on maintaining the visibility of the geomorphological interests so that they are available for researchers and students to study them in the future.

What management is needed on Mynydd Llangynidr SSSI and why?

Although this site is an excellent place for the study of karst geomorphology, it will only remain so if the necessary management continues. CCW's priority is to work with you to ensure that this management is carried out.

What does this mean in practice?

Several different factors could damage the special feature at Mynydd Llangynidr if they are not properly managed. These are the ones we regard as most important:

- **Visibility**

It is essential that the visibility of features such as the doline field is not obscured. Dense growth of trees on the moorland should be prevented as this would obscure the surface geomorphology.

In the past, dolines, particularly some of those close to roads, have been subjected to dumping of rubbish and objects such as fridges and cars. As well as being an eyesore and possibly polluting water courses, continued dumping would obscure the geomorphology. Measures may need to be taken to remove rubbish and prevent any reoccurrence.

- **Quarrying operations**

Quarrying currently occurs at the edge of the site. Any extension of quarrying into Mynydd Llangynidr SSSI would result in permanent destruction of karst and cave features.

- **Access**

Students and researchers need access to study the geomorphology at this site. The features are freely available to view via public rights of way and open access land,

but any intrusive scientific study would be entirely at the discretion of the landowner.

Finally

Our knowledge and understanding of geology is continually improving. It is possible that new issues may arise in the future, whilst other issues may disappear. This statement is written with the best information we have now, but may have to change in the future as our understanding improves. Any information you can provide on the geology of your site, its management and its conservation would be much appreciated.

If you would like to discuss any aspect of your SSSI, or have any concerns about your SSSI, please contact your local CCW office.

Your local office is:

**Countryside Council for Wales
Cantref Court
Brecon Road
Abergavenny
Monmouthshire
NP7 7AX**

Telephone: 01873 737000

23 August 2012