

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

SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

**BLAENAU GWENT/
MONMOUTHSHIRE**

CWM CLYDACH

Date of Notification: 1962, 1981, 1983, 1986, 2000

National Grid Reference: SO 218125

OS Maps: 1:50,000 Sheet number: 161
1:10,000 Sheet number: SO21SW

Site Area: 45 ha

Description:

Cwm Clydach is of special interest for its stands of beech *Fagus sylvatica* woodland, intergrading with more open habitats, which together support a number of rare and scarce vascular plants including whitebeams *Sorbus spp.* and soft-leaved sedge *Carex montana* and important fungal assemblages containing rare species such as *Squamanita paradoxa*. The site is also of special interest in supporting two localities of national geological importance.

The site is situated on the southern side of the River Clydach valley, approximately 2 km east-north-east of Bryn-mawr. The underlying geology varies across the site consisting of sedimentary rocks which range from Old Red Sandstone through Carboniferous Limestone into shales and sandstones of the Millstone Grit and Coal Measures. Soils mainly consist of typical brown earths and humo-ferric podsols. Altitude ranges from 170 m by the River Clydach to 350 m in Cwm Llam-march.

Geology:

Llanelly Quarry shows a sequence from the Old Red Sandstone into the Lower Limestone Shales and Oolite Group of the Carboniferous Limestone. The uppermost Old Red Sandstone here is of earliest Carboniferous age, the facies persisting longer than further south in south Wales. The best available sections of the Clydach Beds and the Gilwern Oolite of the Oolite Group occur here. Above there are superbly-developed palaeokarstic features as well as palaeosols at the top of the Llanelly Formation, here at its type section. Palaeosols here contain unique evidence of early soil-burrowing organisms. All these features make the site of outstanding importance for the elucidation of the stratigraphy and of the evolution of sedimentary environments in south Wales during Lower Carboniferous times.

Llam-march Dingle section complements that seen in the Clydach Gorge to the west and shows the higher Namurian sediments of the condensed >East Crop= sequence. The lower stages of the Namurian are here missing, demonstrating the rapid lateral changes brought about by the positive feature of the >Usk Anticline=. The site is of additional importance for the presence of well-preserved plant remains. It is a key palaeogeographic and stratigraphic locality.

Biology:

The beech woodland at Cwm Clydach, most of which is ancient, comprises a large and characteristic example at the north-western edge of beech's natural geographical range in Britain.

The woodland consists mainly of large maiden beech, with occasional ash *Fraxinus excelsior* on base-rich soils and oak *Quercus petraea* on acidic soils. Of more local occurrence are endemic whitebeams *Sorbus* species and the nationally scarce large-leaved lime *Tilia platyphyllos*. A particular feature of the woodland is the abundance of standing and fallen dead wood, which provides an important habitat for a number of plants and animals. Within the shrub layer, hazel *Corylus avellana* and hawthorn *Crataegus monogyna* are amongst the most frequent species. The ground layer is often a patchy mix of false brome *Brachypodium sylvaticum*, enchanter's-nightshade *Circaea lutetiana*, wood avens *Geum urbanum* and bramble *Rubus fruticosus* agg. More locally, the uncommon yellow bird's-nest *Monotropa hypopitys* and bird's-nest orchid *Neottia nidus-avis* are present. The nationally scarce mosses *Platydictya jungermannioides*, *Campylophyllum calcareum* and *Eurhynchium schleicheri* have also been recorded. Where soils are more acidic the shrub layer is rather sparse and the ground layer is naturally species-poor, with scattered patches of tufted hair-grass *Deschampsia flexuosa*, common bent *Agrostis capillaris*, bilberry *Vaccinium myrtillus*, bracken *Pteridium aquilinum* and the mosses *Mnium hornum*, *Dicranum majus* and *Hypnum cupressiforme*. The more humid parts of the woodland often have a luxuriant bryophyte cover, with some western/Atlantic species such as *Sphagnum quinquefarium*, *Lophocolea fragrans*, *Marchesinia mackaii* and *Saccogyna viticulosa*. A good range of woodland fungi are present at the site, including uncommon species such as *Cantharellus ferruginascens*, *Tremiscus helvelloides*, *Craterellus cornucopioides* and *Russula minutula*.

Rare endemic whitebeams, including *Sorbus anglica*, occur mainly on limestone cliffs in the woodland and on railway and tramway cuttings and old quarry faces. The locally rare bloody crane-bill *Geranium sanguineum* has also been recorded on some of these rock exposures. The nationally scarce soft-leaved sedge occurs mainly on banks within less shaded areas of the woodland and more rarely in calcareous grassland. This grassland has developed on the old limeworkings and along the bed of the old railway track. It is characterised by an abundance of wild thyme *Thymus polytrichus* and common bird's-foot trefoil *Lotus corniculatus*, along with less common species such as autumn gentian *Gentianella amarella* and large thyme *Thymus pulegioides*. Much of this grassland supports a diverse fungal flora including uncommon species such as *Squamanita paradoxa*, *Clavaria rosea*, *Entoloma roseum*, the earth-tongues *Geoglossum umbratile* and *Trichoglossum hirsutum* and the waxcaps *Hygrocybe aurantiosplendens*, *H. cantharellus*, *H. insipida*, *H. quieta* and *H. unguinosa*. A small population of the nationally scarce limestone fern *Gymnocarpium robertianum* occurs in grassland and on walls along the disused railway.

Rare and scarce invertebrates recorded at the site include the craneflies *Gonomyia abbreviata* and *Limonia inusta*, and beetles *Epuraea longula*, *Hylecoetus dermestoides*, *Plegaderus dissectus*, *Pyrochroa coccinea* and *Rhizophagus nitidulus*.

Lesser horseshoe bats *Rhinolophus hipposideros* have been observed foraging within the woodland and several caves are known to be used as roosts.

Scattered stands of secondary woodland, much of which has developed on quarry spoil, hawthorn scrub, neutral grassland, with high cover of false oat-grass *Arrhenatherum elatius*, acidic

grassland, with abundant wavy hair-grass Deschampsia flexuosa, and bracken also add to the ecological diversity of the site.

Remarks:

The site lies within the Brecon Beacons National Park.

The site also incorporates Cwm Clydach National Nature Reserve which was declared in 1962 and 1981.

The site contains vegetation assignable to the >Beech forest on neutral to rich soils (H9130)= and >Beech forest on acid soils (H9120)= habitat types listed on Annex 1 of Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna.

*This document is **NOT** a definitive legal version and has been formatted, updated and partially edited for use on the CCW Web site. This document should not be used in any legal proceedings, public enquiry or any other hearing or appeal. If you require a full legal copy of the document please contact CCW in writing.*