

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

SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

POWYS

BLAEN NEDD

Date of Notification: 1963, 1988, 2003

National Grid Reference: SN 914135

OS Maps: 1:50,000 Sheet number: 160
1:10,000 Sheet number: SN91SW

Site Area: 187.7 ha

Description:

Blaen Nedd is of special interest for its underground cave system and associated karst (classic limestone landscape) surface features, its oak and ash woodland, neutral grassland, calcareous grassland, limestone pavement, marshy grassland, wet dwarf-shrub heath and associated semi-natural habitats.

The site is situated in the upper valley of the Nedd Fechan, approximately 1km west of the village of Ystradfellte. It consists of a series of contiguous enclosures rising eastwards and north-eastwards from the river towards the lower flanks of Fan Nedd. Altitude ranges from 240-390 m. The geology consists of Dinantian ('Carboniferous Limestone') and Namurian ('Millstone Grit') strata. Soils are mainly surface-water gleys and brown earths. Where limestone lies close to the surface, shallow lithomorphic soils have developed and in depressions and over grits, peats have formed.

Geology:

The site contains nearly 10 kilometres (6 miles) of cave passages, most of which lie in the Little Neath River Cave itself. This is an extremely fine system with a large and dramatic main river passage mapped most of the way from the sinks to the resurgence - both located in the main valley riverbed. The caves show a close response to geological structure and demonstrate a complex history of development through underground diversion of a major surface river. The site includes the gorge of the Nedd Fechan which is notable for its sinks and risings, disappearing river and associated karst features.

Biology:

Broadleaved woodland occurs mainly along the river valley, with some small stands scattered across the site. Where soils are base-rich, the canopy consists mainly of ash *Fraxinus excelsior* with occasional rowan *Sorbus aucuparia* and there is often a dense understorey of hazel *Corylus avellana*. Species such as false brome *Brachypodium sylvaticum*, creeping soft-grass *Holcus mollis*, tufted hair-grass *Deschampsia cespitosa*, herb-Robert *Geranium robertianum*, enchanter's- nightshade *Circaea lutetiana* and lady-fern *Athyrium filix-femina* are common in the

ground layer and herb-paris *Paris quadrifolia* and stone bramble *Rubus saxatilis* have been recorded. Ivy *Hedera helix* often cloaks limestone cliffs in the river gorge. In some areas, ash woodland has developed over limestone pavement. Elsewhere, sessile oak *Quercus petraea* and downy birch *Betula pubescens* are the most prominent tree species. In these areas, the shrub layer often consists of scattered hawthorn *Crataegus monogyna* and hazel, with a grassy ground layer of common bent *Agrostis capillaris*, creeping soft-grass, sweet vernal-grass *Anthoxanthum odoratum* and wavy hair-grass *Deschampsia flexuosa*. Bluebells *Hyacinthoides non-scripta* and wood-sorrel *Oxalis acetosella* are frequent.

A series of neutral hay-meadows is present in the west of the site, supporting a typical sward, with herbs such as common knapweed *Centaurea nigra*, ribwort plantain *Plantago lanceolata*, great burnet *Sanguisorba officinalis*, rough hawkbit *Leontodon hispidus* and yellow-rattle *Rhinanthus minor* and the grasses crested dog's-tail *Cynosurus cristatus*, sweet vernal-grass and common bent. Greater butterfly-orchid *Platanthera chlorantha* and common spotted-orchid *Dactylorhiza fuchsii* are also present. Where soils are more calcareous, salad burnet *Sanguisorba minor* and downy oat-grass *Avenula pubescens* are prominent.

Stands of calcareous grassland occur on thinner soils over limestone. Wild thyme *Thymus polytrichus* and sheep's-fescue *Festuca ovina* are often abundant and associated species include salad burnet, common rock-rose *Helianthemum nummularium*, limestone bedstraw *Galium sternerii*, mountain everlasting *Antennaria dioica* and moonwort *Botrychium lunaria*. Floristically similar secondary grassland has developed over limestone spoil heaps resulting from past quarrying activities and in some of these stands, dwarf thistle *Cirsium acaule* is common. Where the sward is more open and rocky, carline thistle *Carlina vulgaris* is common and in some areas soft-leaved sedge *Carex montana* is abundant.

Associated with the calcareous grassland are scattered small areas of limestone pavement with species such as limestone fern *Gymnocarpium robertianum*, lily-of-the-valley *Convallaria majalis*, yellow archangel *Lamiastrum galeobdolon* and globe-flower *Trollius europaeus*. Old limestone quarries have been colonised over the years by plants such as small scabious *Scabiosa columbaria*, mossy saxifrage *Saxifraga hypnoides*, and narrow-leaved bitter-cress *Cardamine impatiens*.

Marshy grassland with a high cover of purple moor-grass *Molinia caerulea* is scattered across the site. Most stands in the valley bottom have frequent to abundant meadow thistle *Cirsium dissectum*, tawny sedge *Carex hostiana*, flea sedge *C. pulicaris*, devil's-bit scabious *Succisa pratensis* and bog pimpernel *Anagallis tenella*. In the north-east, some of the purple moor-grass vegetation is naturally less-diverse in species. Small areas of marshy grassland dominated by *Juncus acutiflorus* are also present.

Wet heath mainly occurs in the larger enclosures, where it is often associated with marshy grassland and acidic grassland and it is sometimes present in hollows between limestone knolls. There is often a high cover of heather *Calluna vulgaris*, purple moor-grass and deergrass *Trichophorum cespitosum*, with bilberry *Vaccinium myrtillus*, cross-leaved heath *Erica tetralix* and *Cladonia* lichens also common.

Other habitat types include acid grassland with a high cover of sheep's-fescue and heath bedstraw *Galium saxatile* or mat-grass *Nardus stricta* or heath rush *Juncus squarrosus*, acid flush with a high cover of rushes and bog-moss *Sphagnum*, base-rich flush with abundant brown mosses and

dry heath with heather and western gorse *Ulex gallii*. Stands of bracken *Pteridium aquilinum* are scattered across the site, often occurring at the fringes of woodland, acidic and calcareous grassland but also occupying better-drained soils within blocks of wet heath and marshy grassland.

Other uncommon species recorded at the site include broad-leaved cotton grass *Eriophorum latifolium*, fragrant orchid *Gymnadenia conopsea*, wood bitter-vetch *Vicia orobus*, rock pouncewort *Cololejeunea calcarea*, the earth-tongue fungus *Microglossum olivaceum* as well as some notable crane-flies.

Remarks:

The site lies within the Brecon Beacons National Park.

The site contains vegetation assignable to the habitat types listed on Annex 1 of Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna.

Blaen Nedd SSSI is part of Coedydd Nedd a Mellte candidate Special Area of Conservation (cSAC), being host to the following habitats listed in Annex I of the EC Habitats Directive (Directive 92/43/EEC on the Conservation of Natural habitats and of Wild Fauna and Flora): 'Tilio-Acerion forests of slopes, screes and ravines (H9180)' and 'Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles (H91A0)'

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