## CYNGOR CEFN GWLAD CYMRU COUNTRYSIDE COUNCIL FOR WALES

## SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

POWYS GWEUNYDD NANT Y DERNOL

**Date of Notification:** 2000

**National Grid Reference:** SN 914746

**O.S. Maps:** 1:50,000 Sheet number: 136

1:10,000 Sheet number: SN 97 SW

Site Area: 3.1 ha

## **Description:**

Gweunydd Nant y Dernol is of special interest for its unimproved acidic grassland, mixed with smaller areas of neutral grassland, marshy grassland, wet heath, acid flush and wet woodland, in association with a small stream. The site is situated approximately 7 km north-west of Rhayader at an altitude of 250. The Nant y Dernol is a small tributary of the upper Wye which forms the boundary between the former counties of Radnorshire and Montgomeryshire.

The site occupies a series of gravel terraces, steep banks and damp depressions adjacent to the Nant y Dernol, which are of fluvio-glacial origin. The drier soils are generally acidic and the wetter hollows support localised peat deposits. The underlying rocks are Llandovery (Silurian) shales.

The varied topography and soil drainage has given rise to a variety of distinctive vegetation types and there are well-displayed transitions between these types. Of particular interest, on the drier soils, is a species-rich type of acid grassland which is scattered throughout the site. The predominant grasses here are common bent Agrostis capillaris, sweet vernal grass Anthoxanthum odoratum and sheep's fescue Festuca ovina along with a large number of characteristic associates including tormentil Potentilla erecta, heath bedstraw Galium saxatile, harebell Campanula rotundifolia, bitter vetch Lathyrus linifolius, common bird's-foot-trefoil Lotus corniculatus, devil's-bit scabious Succisa pratensis, betony Stachys officinalis, spring sedge Carex caryophyllea, heath grass Danthonia decumbens and the moss Rhytidiadelphus squarrosus, and more unusual species, such as dyer's green weed Genista tinctoria, fairy flax Linum catharticum and wood bitter-vetch Vicia orobus. Elsewhere, less acidic conditions are indicated by an increase in red fescue Festuca rubra, Yorkshire fog Holcus lanatus, yarrow Achillea millefolium, white clover Trifolium repens, common mouse-ear Cerastium fontanum, common sorrel Rumex acetosa and common knapweed in the sward, along with species such as burnet saxifrage *Pimpinella saxifraga*. In places, the more mature river terraces support grassland characterised by abundant crested dog's-tail Cynosurus cristatus, common bent and sweet vernal grass, and species such as common knapweed, autumn hawkbit Leontodon autumnalis and eyebright Euphrasia agg.

Wet hollows adjacent to the stream are largely dominated by sharp-flowered rush *Juncus acutiflorus*, with a range of characteristic associates, including common marsh bedstraw *Galium* 

palustre, greater bird's-foot-trefoil Lotus uliginosus, meadowsweet Filipendula ulmaria, sneezewort Achillea ptarmica, lesser spearwort Ranunculus flammula, marsh violet Viola palustris, and common valerian Valeriana officinalis. Elsewhere peat has accumulated and the sward is dominated by purple moor-grass Molinia caerulea.

Acid flushes are also dominated by sharp-flowered rush over a carpet of bog moss *Sphagnum recurvum* and star sedge *Carex echinata*. Small patches of wet heath support species such as cross-leaved heath *Erica tetralix*, deer-grass *Scirpus cespitosus*, bog mosses *Sphagnum spp.*, bilberry *Vaccinium myrtillus* and the locally scarce petty whin *Genista tinctoria*.

Additional interest is provided by the Nant y Dernol itself, and some patches of downy birch *Betula pubescens* woodland along its banks. The stream supports otters *Lutra lutra* and bullhead *Cottus gobio*, and provides important habitat for spawning and juvenile Atlantic salmon *Salmo salar*.

## **Remarks:**

Otter and Atlantic salmon are listed in the European directive on the conservation of natural habitats and of wild flora and fauna (92/43/EEC).

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