

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

SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

CEREDIGION

CORS NANTCWNLLLE

Date of Notification: 2000

National Grid Reference: SN 575599

O.S. Maps: 1: 50, 000 Sheet number: 146
1: 10, 000 Sheet number: SN 55 NE, SN 56 SE

Site Area: 37.6 ha

Description:

Cors Nantcwnlle is of special interest in supporting a range of peat-forming vegetation types within a topographical basin, and lies at an altitude of approximately 250 metres at the head of the Nant Rhiwafallen, on the southern slopes of the Mynydd Bach. The underlying bedrock is dominated by the Mynydd Bach formation, a component of the Aberystwyth Grits Group. These rocks are of the Lower Silurian age (Llandovery Series), having been deposited 435 million years ago. The peat body is believed to have developed over a bed of glacial till.

The site was probably once a basin raised bog, a now rare type of peatland fed more or less exclusively by rainfall and characterised by the accrual over thousands of years of many metres of peat. However, as with many other examples of raised mire in the UK, much of the site has been extensively cut-over for the extraction of peat and little if any of the original surface appears to have survived intact. The contemporary vegetation reflects this past disturbance and incorporates areas of wet poor-fen in some of the deeper peat cuttings, drier acid peatland vegetation dominated by heather *Calluna vulgaris* and extensive areas of wet *Sphagnum* bog with hare's-tail cottongrass *Eriophorum vaginatum*.

Poor-fen describes a range of wetland habitats founded on peat which are irrigated by water poor in nutrients. At Cors Nantcwnlle these communities are dominated by various species of *Sphagnum* (chiefly *Sphagnum recurvum* and *S. fimbriatum*) and a restricted range of flowering plants, including bottle sedge *Carex rostrata*, marsh cinquefoil *Potentilla palustris*, marsh pennywort *Hydrocotyle vulgaris*, cranberry *Vaccinium oxycoccus* and soft-rush *Juncus effusus*. The locally scarce royal fern *Osmunda regalis* is a notable component of some examples of this vegetation.

Often occurring in close proximity to this vegetation is another type also dominated by various species of *Sphagnum* moss, but in which a range of acid peatland species occur, including hare's-tail cottongrass, cross-leaved heath *Erica tetralix*, purple moor-grass *Molinia caerulea* and bog asphodel *Narthecium ossifragum*. These lower-lying habitats contrast sharply with various levels

of less intensively worked peat in which heather is the dominant species. Some very species-poor examples of this vegetation occupy peat baulks raised by as much as 1.2 metres above the general mire surface – these areas graphically illustrate the extent of past peat cutting at Cors Nantcwnlle.

Most of the marginal poor-fen occupying the former lagg zone is poor in species, and is variously dominated by soft-rush, purple moor-grass and bottle sedge. Towards the outflow at the south-western corner of the site richer communities occur, with sharp-flowered rush *Juncus acutiflorus* locally dominant and such species as common valerian *Valeriana officinalis* and whorled caraway *Carum verticillatum* present. A stand of secondary wet woodland dominated by grey willow *Salix cinerea* and downy birch *Betula pubescens* occupies the north-western part of the mire basin. Narrow buckler-fern *Dryopteris carthusiana* is unusually abundant over much of the mire.

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