CYNGOR CEFN GWLAD CYMRU COUNTRYSIDE COUNCIL FOR WALES

SITE OF SPECIAL SCIENTIFIC INTEREST: CITATION

SWANSEA AND NEATH PORT TALBOT CORS CRYMLYN/CRYMLYN BOG

Date of Notification:	1975, 1983, 1985,1997, 2003
National Grid Reference:	SS695945
<u>OS Maps:</u>	1:50,000 Sheet number: 159 and 170 1:10,000 Sheet number: SS 69 SE, SS 69 NE SS 79 SW, SS 79 NW
<u>Site Area:</u>	<u>279.9</u> ha

Description:

Crymlyn Bog is of special interest for its fen (topogenous mire) communities, wet woodland, associated invertebrate assemblages, a substantial population of the nationally rare slender cotton grass *Eriophorum gracile* and a population of the nationally scarce hornet robberfly *Asilus crabroniformis*. It is the most extensive area of lowland fen in South Wales and is situated 3.5 km east of central Swansea within a landscape heavily influenced by past and present industrial activities.

The site is part of a larger inter-estuarine complex including Pant-y-Sais SSSI and the Neath flood plain. Crymlyn Bog owes its form to glacial erosion, followed by a series of Boreal marine incursions, giving rise to sequences of clay and peat. The main fen area which developed on these deposits lies between 5 - 7 m above sea level.

Recent studies of preserved plant remains in the peat have revealed a complex and unusual pattern of vegetation change extending back over 7,000 years. Some parts of the site at least demonstrate that a classic succession took place from open reedswamp through fen and fen carr to rain-fed bog, with the latter persisting for over 1,000 years before reverting to fen. This reversion from bog back to fen is highly unusual and took place at about 1,000 AD, possibly as a result of increased runoff from the site catchment.

The site comprises of a complex mosaic of vegetation types, including communities of both rich and poor fen, swamp, alder carr and acidic grassland. Unusually some of the plant species and communities are more characteristic of East Anglian fens.

Several sources of water and differing patterns of flow have created complex environmental gradients resulting in a wide range of fenland communities. These range from *Sphagnum*-dominated poor-fen, with bog asphodel *Narthecium ossifragum* and greater bladderwort *Utricularia vulgaris*, through others with bottle sedge *Carex rostrata*, marsh cinquefoil *Potentilla palustris* and bog bean *Menyanthes trifoliata*, to more eutrophic and taller associations with lesser bulrush *Typha angustifolia*, bulrush *Typha latifolia*, great fen-sedge *Cladium mariscus*, tufted-sedge *Carex elata* and common reed *Phragmites australis*. Purple moor-grass *Molinia caerulea*

becomes dominant in drier areas, with pure *Phragmites* reedswamp where conditions are wettest. The eastern margin bears greater tussock-sedge *Carex paniculata*, and alder carr woodland.

Plant species of particular interest include the nationally rare slender cottongrass *Eriophorum* gracile, whilst tufted sedge, bog-sedge *Carex limosa*, dioecious sedge *Carex dioica*, cyperus sedge *Carex pseudocyperus*, saw sedge, greater spearwort *Ranunculus lingua*, least bur-reed *Sparganium natans*, lesser water-plantain *Baldellia ranunculoides*, slender spike-rush *Eleocharis uniglumis* and black bog rush *Schoenus nigricans* are close to the limit of their British geographical range and/or of limited distribution locally. The royal fern *Osmunda regalis* occurs in several communities and is particularly well represented on this site.

Carr woodland is a rare habitat and this site contains one of the largest areas of alder carr in Wales, characterised by species such as alder *Alnus glutinosa*, alder buckthorn *Frangula alnus*, grey willow *Salix cineria* and downy birch *Betula pubescens*.

Crymlyn Bog is also of national importance for invertebrates, supporting several rare and nationally scarce species. These include the water beetle *Limnoxenus niger*, the cranefly *Pilaria nigropunctata* and the jumping spider *Marpissa radiata*. Open waterways and marginal flushes support the scarce blue-tailed damselfly *Ischnura pumilio* and the variable damselfly *Coenagrion pulchellum*.

Also of note is the hornet robber fly *Asilus crabroniformis*, a declining species nationally, occurring in the traditionally grazed pastures bordering the fen.

There are sizeable breeding populations of reed warbler *Acrocephalus scirpaceus* and sedge warbler *Acrocephalus schoenobaenus* associated with the denser areas of *Phragmites*.

Remarks:

Slender cottongrass *Eriophorum gracile* is listed on Schedule 8 of the Wildlife and Countryside Act.

Cors Crymlyn/Crymlyn bog SSSI is part of Cors Crymlyn/Crymlyn Bog candidate Special Area of Conservation, 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).

'Calcareous fen with *Cladium mariscus* and species of the *Caricion davallianae*', 'Transition mires and quaking bogs',

'Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-padion, Alnion incanae and salicion alvae)'.

The majority of the SSSI area is also designated as a Wetland of International Importance under Ramsar Convention