Sites of Importance for Nature Conservation in Caerphilly County Borough Council

LDP Policy Ref. NH 3.49 SINC name: Pen-y-fan Pond and Meadows, west of Pentwyn

Grid reference: SO196007 Area (hectares): 49

Survey date: 27th July and 1st August 2007

Surveyed by: Dr Peter Sturgress (Hyder Consulting Ltd.)

(UDP policy reference: C11.24)

Summary description

A series of connected habitats including, marshy grassland, acid grassland, heath, species-rich semi-improved grassland, Bracken, scrub, and Pen-y-Fan Pond (reservoir). The reservoir is manmade, but fringed by a mix of wet grassland and heath vegetation. Its aquatic vegetation includes Shoreweed, a locally rare plant. The fields within Pen-y-Fan Pond Country Park (at the centre of the SINC) support a mix of marshy grassland and wet heath, locally dominated by Gorse, Bracken, Purple moor-grass and Wavy hair-grass. Other species include Heather, Cross-leaved Heath, Bilberry and Sphagnum mosses. The fields to the north and northwest support horse-grazed and cattle-grazed short, semi-improved neutral grassland and Bracken. There is a high proportion of herb species, including Common knapweed, Devil's-bit scabious, Eye-bright, Tormentil, Bird's-foot trefoil, Lousewort, Meadow thistle, Harebell and Ivy-leaved bellflower. Waxcap fungi are also present. Mature Beech trees form the field boundaries and a small area of Birch woodland is also present. To the west of Manmoel Road, the fields mainly support marshy grassland, with areas of semi-improved neutral grassland and flush vegetation. The habitats are variable within the fields with some drier areas also present. Species include Purple moor-grass, Devil's-bit scabious, Meadow thistle, Common cotton-grass, Marsh violet, Marsh pennywort, several sedges and Sphagnum mosses.

Qualifying features

Marshy grassland / flush vegetation with at least 12 indicators.

Semi-improved neutral grassland with at least 8 indicator species.

Acid grassland / heath with at least 7 indicator species.

Standing open water with diverse bank-side and aquatic vegetation.

Lesser Horseshoe Bat roost.

Secondary features

Scrub and young woodland.

Hedgerows with mature trees.

Streams.

Bracken.

Potential value/ unconfirmed features

Further botanical survey would undoubtedly confirm the presence of additional species.

Some of the short-grazed fields in the north and northwest have potential to support good

populations of grassland fungi.

The site is likely to support a high diversity of invertebrates, and could potentially include Marsh fritillary butterfly.

The area is likely to support good numbers of reptiles.

The site is likely to provide good foraging and roosting habitat for bats.

Access/ community use

Several public footpaths cross the area and the central part is a Country Park.

Current management (including problems and opportunities for biodiversity enhancement)

Horses and cattle currently graze the fields in the north and west, which is ideal management for these habitats. The fields immediately northwest of the reservoir were not grazed and had a high proportion of Gorse and Bracken. Control of these species would be beneficial, followed by light grazing by horses or cattle to improve the habitats. Other opportunities for biodiversity enhancement could include the creation of small ponds in areas of lower value for nature conservation.

Additional information

A few areas within the Country Park are borderline with respect to the SINC selection criteria, but have been included as they form links between more valuable areas. The wider area is very variable in its mix of habitats and some nearby fields may also be of value for wildlife.

Species list (Dominant species, SINC Criteria, RDB or other notable indicator species) (LBAP species shown in **bold**, species confirmed by 2007 survey in *italics*)

Woodland, hedge and scrub tree and shrub species: Fagus sylvatica, Quercus petraea, Betula pubescens, Corylus avellana, Sorbus aucuparia, Crataegus monogyna, Ilex aquifolium, Rubus fruticosus, Betula pendula, Hedera helix, Fraxinus excelsior, Alnus glutinosa, Salix cinerea, Salix caprea Lonicera periclymenum, Prunus spinosa, Rosa arvensis, Salix repens, Salix aurita, Ulex europaeus, Ulex gallii.

Woodland and hedge ground flora: Digitalis purpurea, Lysimachia nemorum, **Hyacinthoides non-scripta**, Oxalis acetosella, Viola riviniana, Anthoxanthum odoratum, Holcus mollis, Agrostis capillaris, Deschampsia flexuosa, Deschampsia cespitosa, Luzula multiflora, Pteridium aquilinum, Blechnum spicant, Dryopteris filix-mas, Dryopteris dilatata, Equisetum sylvaticum, Mnium hornum, Kindbergia praelonga, Polytrichum formosum, Pseudotaxiphyllum elegans, Diplophyllum albicans.

<u>Pen-y-fan pond margins:</u> Elodea sp., Galium palustre, Angelica sylvestris, Ranunculus flammula, Ranunculus lingua, Typha latifolia, Succisa pratensis, Molinia caerulea, Agrostis stolonifera, Glyceria fluitans, Eleocharis palustris, Juncus effusus, Juncus tenuis, Juncus squarrosus, Sphagnum sp., Polytrichum commune.

Marshy grassland and flush species (Fields at SO195006, SO192003 and 189002): Lotus pedunculatus, Potentilla erecta, Ranunculus flammula, Hydrocotyle vulgaris, Calluna vulgaris, Myosotis laxa, Epilobium palustre, Succisa pratensis, Stellaria alsine, Valeriana officinalis, Oenanthe crocata, Filipendula ulmaria, Lychnis flos-cuculi, Vaccinium myrtillus, Erica tetralix, Pedicularis sylvatica, Anagallis tenella, Lysimachia nemorum, Viola palustris, Mentha aquatica, Dactylorhiza maculata, Cirsium dissectum, Wahlenbergia hederacea, Polygala serpyllifolia, Potamogeton polygonifolius, Molinia caerulea, Deschampsia cespitosa, Agrostis canina, Carex viridula, Carex panicea, Carex ovalis, Carex echinata, Carex nigra, Carex laevigata, Carex binervis, Eriophorum angustifolium, Juncus acutiflorus, Juncus effusus, Juncus bulbosus, Luzula multiflora, Athyrium filix-femina, Dryopteris dilatata, Equisetum sylvaticum, Aulacomnium palustre, Polytrichum commune, Sphagnum palustre, Sphagnum subnitens, Sphagnum denticulatum, Sphagnum of inundatum, Calliergonella cuspidata.

Semi-improved neutral grassland species (fields at SO193007, SO196011 and SO193012):

Potentilla erecta, Succisa pratensis, Centaurea nigra, Euphrasia sp., Pedicularis sylvatica, Trifolium pratense, Lotus corniculatus, Pimpinella saxifraga, Leontodon hispidus, Cirsium dissectum, **Dactylorhiza sp.**, Pilosella officinarum, Rumex acetosa, Prunella vulgaris, Rumex acetosella, Stellaria graminea, Achillea millefolium, Digitalis purpurea, Hypochaeris radicata, Wahlenbergia hederacea, Galium saxatile, Scutellaria minor, Campanula rotundifolia, Leontodon autumnalis, Festuca rubra, Agrostis capillaris, Anthoxanthum odoratum, Danthonia decumbens, Briza media, Festuca ovina, Cynosurus cristatus, Phleum pratense, Nardus stricta, Carex pilulifera, Carex binervis, Carex panicea, Luzula campestris, Luzula multiflora, Pteridium aquilinum, Scleropodium purum, Rhytidiadelphus squarrosus, Polytrichum juniperinum. Grassland fungi were also present, including Hygrocybe intermedia, H.chlorophana and Entoloma chalybaeum var lazulinum.

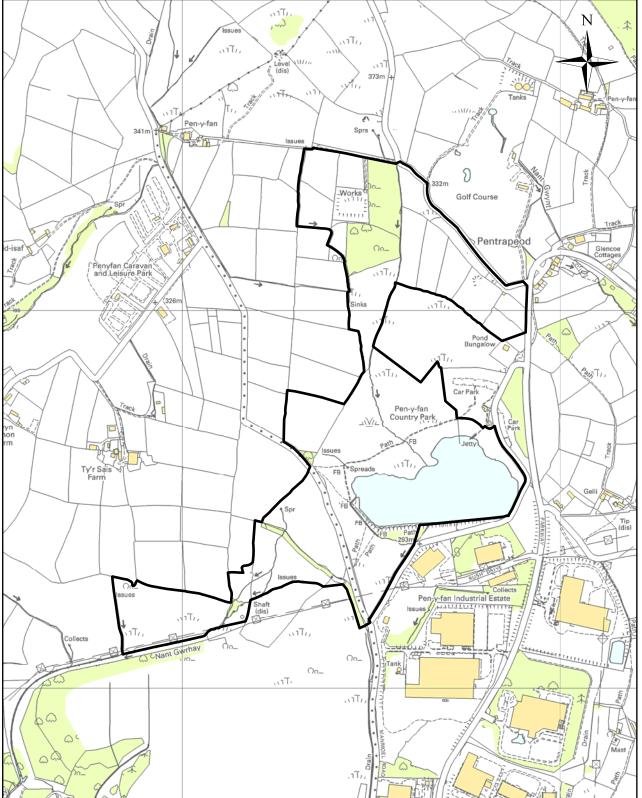
<u>Fauna observations:</u> Rabbit, Fox, **Common Frog, Common Toad, Reed Bunting, Green Woodpecker,** Great Spotted Woodpecker, Coot, Grey Heron, Chaffinch, Willow Warbler, Robin, Dunnock, Redpoll, Wren, Blue Tit, Jay, Goldfinch, Meadow Brown Butterfly, Small Tortoiseshell Butterfly.

Additional species noted from desk study: **Buzzard, Kestrel, Skylark**, Pochard, Tufted Duck, Little Grebe, Small Pearl-bordered Fritillary Butterfly, Litorella uniflora, Myriophyllum alterniflorum, Carex hostiana, Menyanthes trifoliata, **Dactylorhiza praetermissa**, Trichophorum cespitosum.

Caerphilly County Borough Council Site of Importance for Nature Conservation LDP Policy Ref: NH 3.49 (SINC 024)

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Pen-y-Fan Pond and Meadows, West of Pentwyn 49 Ha



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