Sites of Importance for Nature Conservation in Caerphilly County Borough Council

<u>LDP Policy Ref. NH 3.88</u> SINC name: Cwm Dows Valley, east of Penmaen

Grid reference: ST200974 Area (hectares): 33

Survey date: 16<sup>th</sup> & 18<sup>th</sup> July 2007 Surveyed by: Dr Peter Sturgess (Hyder Consulting Ltd.)

(UDP policy reference: C11.68)

# **Summary description**

A narrow wooded valley extends through the centre of the site, with a shaded, narrow stream and several small tributaries. The woodland has a mixed character, with some wet areas of Alder and Downy Birch woodland grading through to drier areas dominated by Oak and Beech, with Bracken and Bluebells. A series of small fields and a well-connected network of tall, mature hedgerows border the wooded areas. In many cases the hedges resemble strips of woodland, with mature standard Oak and Beech trees and dense shrubby growth of Hawthorn, Blackthorn and other hedgerow shrubs, and typical woodland plants in their ground flora. The fields are similarly variable. Most of the fields in the north are horse-grazed pastures with a moderately diverse grassland flora, and supporting several species of waxcap fungi, and patches of rush-dominated marshy grassland. The more central and southeastern fields support less heavily grazed swards dominated by Purple moor-grass, locally with a diverse mix of wetland plants, including high densities of Devil's-bit scabious and Meadow thistle. There are also several flower-rich fields managed for hay in the east of the site.

# **Qualifying features**

Semi-natural broadleaved woodland with an assemblage of indicator species.

Species-rich marshy grassland with at least 14 indicator species.

Neutral grassland with at least 8 indicator species and flower-rich hay meadows.

## **Secondary features**

Streams.

Scrub.

Grassland supporting waxcap fungi.

## Potential value/ unconfirmed features

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

The woodland has potential to support Dormice.

Otters may also use the stream corridors.

The grassland areas are likely to support a high diversity of invertebrates, possibly including uncommon species such as Marsh fritillary, Small pearl-bordered fritillary or Narrow-bordered bee hawk moth.

The presence of waxcaps suggests that this is a good site for grassland fungi. The site is likely to support additional grassland fungi species and may reach SINC qualifying criteria for waxcaps.

## Current management (including problems and opportunities for biodiversity enhancement)

Horses lightly grazed the most northerly and southerly fields at the time of the survey, resulting in good conditions for fungi, and allowing species such as Devil's-bit scabious to persist in good numbers. The eastern hay-fields were closed, ready for cutting. The majority of the marshy grassland fields were not grazed and some of them appear to have been unmanaged for several years, resulting in a substantial loss of grassland diversity and an increase in scrub. Some form of light or intermittent grazing by cattle or horses would be preferable for this type of habitat. Scrub clearance has recently taken place in two of the southeastern fields. The western field has a shorter sward, grazed by cattle and possibly horses. The woodland areas are generally un-grazed, with a dense canopy and a relatively sparse ground flora. Allowing livestock limited access to these woodland areas would be beneficial, as it would help to reduce the dominance of the shrub layer. The damp conditions in much of this area would lend themselves to pond creation, which would enhance the site for biodiversity.

# Access/ community use

Two public footpaths cross the southern part of the area. There is no other formal public access.

## Additional information

Several of the fields and hedges in the adjoining area are likely to have some value for biodiversity. Aerial photographs suggest that the fields adjoining the eastern part of the SINC (ST201973) support damp grassland that may be of value for nature conservation. The south-facing Bracken-covered slope at ST201974 may also be worthy of further investigation. These should be considered at future SINC review.

## Species list (Dominant species, SINC Criteria, RDB or other notable indicator species)

(LBAP species shown in **bold**, species confirmed by 2007 survey in *italics*)

Hedge and woodland tree and shrub species: Quercus petraea, Quercus robur, Betula pubescens, Fagus sylvatica, Alnus glutinosa, Corylus avellana, Salix cinerea, Lonicera periclymenum, Prunus padus, Sorbus aucuparia, Rubus fruticosus, Crataegus monogyna, Ilex aquifolium, Fraxinus excelsior, Frangula alnus, Hedera helix, Salix caprea, Viburnum opulus, Ulex gallii, Malus sp., Salix aurita, Rosa arvensis.

Hedge and woodland ground flora species: Lamiastrum galeobdolon, **Hyacinthoides non-scripta**, Oxalis acetosella, Anemone nemorosa, Digitalis purpurea, Melampyrum pratense, Potentilla erecta, Ajuga reptans, Circaea lutetiana, Viola riviniana, Viola palustris, Stachys sylvatica, Conopodium majus, Stellaria holostea, Solidago virgaurea, Chrysosplenium oppositifolium, Deschampsia flexuosa, Holcus mollis, Agrostis capillaris, Anthoxanthum odoratum, Pteridium aquilinum, Athyrium filix-femina, Blechnum spicant, Dryopteris dilatata, Dryopteris filix-mas, Atrichum undulatum, Mnium hornum, Kindbergia praelonga, Polytrichum formosum, Pseudotaxiphyllum elegans, Fissidens bryoides, Thuidium tamariscinum, Plagiomnium undulatum, Eurhynchium striatum.

Grassland species in marshy grassland fields (includes a range of fields, ranging from damp neutral grassland to marshy grassland dominated by Purple moor-grass): Succisa pratensis, Cirsium palustre, Lotus pedunculatus, Cirsium dissectum, Lychnis flos-cuculi, Galium palustre, Potentilla erecta, Viola palustris, Calluna vulgaris, Stellaria alsine, Dactylorhiza maculata, Ranunculus flammula, Valeriana officinalis, Mentha aquatica, Rhinanthus minor, Hypericum tetrapterum, Achillea ptarmica, Oenanthe crocata, Prunella vulgaris, Serratula tinctoria, Epilobium palustre, Pedicularis sylvatica, Hydrocotyle vulgaris, Lysimachia vulgaris, Lathyrus pratensis, Ranunculus acris, Trifolium pratense, Eupatorium cannabinum, Molinia caerulea, Deschampsia cespitosa, Holcus lanatus, Agrostis canina, Agrostis capillaris, Anthoxanthum odoratum, Nardus stricta, Danthonia decumbens, Briza media, Poa trivialis, Carex ovalis, Carex panicea, Carex nigra, Carex binervis, Carex viridula, Carex echinata, Carex pallescens, Luzula multiflora, Isolepis setacea, Juncus acutiflorus, Juncus effusus, Juncus bulbosus, Pteridium aquilinum, Calliergonella cuspidata, Sphagnum fallax, Polytrichum commune, Rhytidiadelphus squarrosus, Scleropodium

purum.

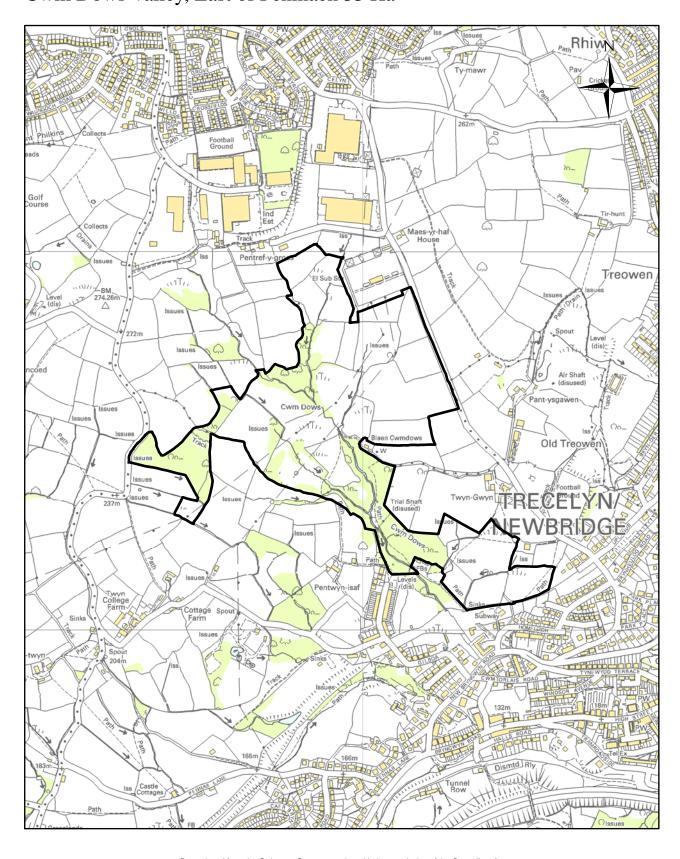
Grassland species in shorter horse-grazed pastures (includes most northerly and easterly fields): Centaurea nigra, Succisa pratensis, Trifolium pratense, Potentilla erecta, Plantago lanceolata, Leontodon hispidus, Lotus corniculatus, Pimpinella saxifraga, Odontites vernus, Centaurium erythraea, Ranunculus acris, Galium saxatile, Pilosella officinarum, Holcus lanatus, Agrostis capillaris, Anthoxanthum odoratum, Festuca rubra, Molinia caerulea, Nardus stricta, Juncus effusus, Juncus acutiflorus, Luzula campestris.

The fungi Hygrocybe intermedia, H.conica, H.flavipes, H.citrinovirens, H.glutinipes, H.chlorophana and several Entoloma spp. were noted in the northern field ST198979, H.intermedia was also present in the eastern field at ST204972.

Grassland species in the hay-meadows at ST201976: Trifolium pratense, Lotus corniculatus, Lathyrus pratensis, Euphrasia sp., Plantago lanceolata, Centaurea nigra, Hypochaeris radicata, **Rhinanthus minor**, Stellaria graminea, Achillea millefolium, Anthoxanthum odoratum, Festuca rubra, Agrostis capillaris, Carex flacca. Hygrocybe chlorophana was noted in one of the hay fields.

<u>Fauna observations:</u> **Badger**, Rabbit, Fox, Hedgehog, **Buzzard, Bullfinch,** Great Spotted Woodpecker, Chaffinch, Coal Tit, Raven, Chiffchaff, Jay, Blackbird, Goldfinch, Meadow Brown Butterfly, Small Skipper Butterfly, Large Skipper Butterfly, Marbled White Butterfly, Gatekeeper Butterfly, Red Admiral Butterfly, Burnet Moths.

Additional species noted from desk study and consultation: **Dactylorhiza fuchsii**, Genista anglica, Carex pulicaris, Carex paniculata, Caltha palustris, Veronica anagallis-aquatica, Phegopteris connectilis.



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