



**MERTHYR TYDFIL COUNTY BOROUGH
SITES OF IMPORTANCE FOR NATURE CONSERVATION
GETHIN FOREST
SURVEY & ASSESSMENT FOR SINC DESIGNATION**

February 2013

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Site Name: GETHIN FOREST

Grid Ref(s):
SO 034 031(W); SO 024 052 (N); SO 059 30 (E);
SO 055 017 (S)

Site No.:

Status: Site surveyed in November 2012, and assessed against relevant criteria January 2013

Candidate	✓	Date: January 2013
Proposed		Date:
Confirmed		Date:

Summary - Reasons for Selection/Interest of Site:

The whole site qualifies as a candidate SINC for its mosaic of habitats, which support a diverse range of flora and fauna.

Situated between Mynydd Gethin and the A470, the site is largely upland with semi upland slopes supporting extensive 'Ffridd' habitat.

The site is largely conifer plantations, with areas of semi natural broad leaved woodland which occur predominantly along streams within the site and form wet woodland in low lying areas towards the east of the site – both woodland types supporting a good assemblage of ancient woodland indicator species. Young woodland and scrub surrounds mature woodland in these areas. Smaller areas of heathland are present along the majority of woodland tracks and margins, usually occurring in a mosaic with acid and or marshy grassland. Bracken/ffridd habitat occurs in small open areas along the slopes to the east. A quarry is present in the north west of the site, and provides a mosaic of habitats including ponds, marshy grassland, ruderal vegetation and scattered scrub as well as rock outcrops with dwarf shrub heath. Many of the conifer plantations have been felled and now create open areas within the forestry. This mosaic of habitats within the site supports a rich variety of fauna, including species which are rare in the County Borough.

Plants of note include stags horn clubmoss (*Lycopodium clavatum*) which has been recorded at several locations within the site, together with crowberry (*Empetrum nigrum*) and royal fern (*Osmunda regalis*) which have also been recorded from the site. Other locally important species included ivy leaved bellflower (*Wahlenbergia hederacea*).

The site is important for specialist breeding birds such as nightjar and goshawk, and provides breeding and overwintering habitats for barn owl. Other important species known to breed and or overwinter within the site include linnet, lesser redpoll, common cuckoo, woodchat, stonechat, starling, common bullfinch, raven, pied flycatcher, green woodpecker and Eurasian woodcock

Pond networks and their surrounding semi natural habitats within the site are important for the rare and protected great crested newt, which are known to breed within the local area.

Meets SINC Selection Criteria No.s:

H1, H3, H6, H7, H9, H10, H12, H15, H16, H18, H20, H21, H22, S1, S2, S4, S7

Criteria in use : WBP (2008)Mid Valleys SINC criteria

Primary Features i.e. Qualifying criteria:

Mosaic Habitats and common land (H20) – Mosaic of upland and semi upland habitats comprising conifer plantation, semi natural broad leaved, wet and replanted ancient woodland, heathland, acid grassland, watercourses, standing open water, flushes and supporting scrub, neutral grassland and ffridd

<p>Woodland (H1) – replanted woodland with a range of semi natural woodland indicators, conifer woodlands that support remnant heathland/acid grassland mosaics, wet woodland, semi natural woodland with a range of ancient woodland indicators and planted ancient woodland</p> <p>Acid grassland (H7) – acid grassland with 12 indicator species Heath and Grass heath (H10) – wet and dry heathland Bog Habitats and Flushes (H12) – numerous unmodified flushes Watercourses (H15) – several streams throughout the site Standing water (H16) – network of ponds supporting great crested newts Birds (S2) including breeding nightjar, goshawk and barn owl. Amphibians (S4) including great crested newt Plants (S7) including stag horn clubmoss.</p>			
<p>Secondary Features i.e. Contributory criteria: Scrub Communities (H3) Marshy Grassland (H7) Ffridd (H9) Mineral Spoil and Post-industrial land (H18) Rock Exposures (H2) Mammals (S1) Contributory species include brown hare & badgers Birds (S2) Contributory species include linnet, lesser redpoll, common cuckoo, woodchat, stonechat, starling, common bullfinch, raven, pied flycatcher, green woodpecker and Eurasian woodcock Plants (S7) Contributory species include crowberry and royal fern.</p>			
UK BAP	<p>Priority Habitats: Lowland mixed deciduous woodland Upland oakwood Wet woodland Upland heathland Purple moor grass and rush pasture Rivers and streams Ponds Upland flushes, fens and swamps Inland rock outcrops and scree habitats Open mosaic habitats on previously developed land</p>	<p>Priority Species: Bats Great crested newts Tree pipit Nightjar Lesser redpoll Common linnet Common cuckoo Curlew Wood warbler Dunnock Common bullfinch Starling Song thrush Barn owl Lapwing</p>	
LBAP	<p>Key Habitats: Broad leaved woodland Grassland Heathland Wetland Rivers and streams Inland rock Coniferous plantation Ffridd</p>	<p>Key Species: GCN Nightjar Common linnet Common crossbill Common bullfinch Song thrush Barn owl Lapwing Red necked footman</p>	
<p>Protected Species: GCN, Barn owl, common crossbill, goshawk (green sandpiper, and fieldfare)</p>			
<p>Previously identified areas of interest contained within SINC: None</p>			
<p align="center">See continuation sheet:</p>		<p align="center">See Confidential File:</p>	<p align="center">Yes No</p>
<p>Other statutory/non-statutory wildlife sites contained by/adjacent to SINC: Gwm Glo SSSI & SINC Blaencanaid, Rhyd Y Car West, Cwm Woods, Craig Gethin, Buarth Waunydd, CNWC SINC's</p>			

Main sources of data:

Forestry Commission
South East Wales Biodiversity Records Centre (SEWBRcC)
Merthyr Tydfil County Borough Council

Validation survey(s):

Surveyor

Date

C Pooley

Nov 2012

Remarks:

1.0 INTRODUCTION

- 1.1 This report has been prepared by David Clements Ecology Ltd (DCE) on the instructions of Merthyr Tydfil County Borough Council (MTCBC). It sets out the results of an ecological survey and assessment of an area of land known as ‘Gethin Forest’ in the Merthyr Tydfil county borough of Glamorgan, in South Wales. The site is one of several areas of conifer woodlands, owned by the Forestry Commission (FC), that have been identified as potential Sites of Importance for Nature Conservation (SINC) and require further assessment. This report aims to establish whether this site is worthy of consideration as a SINC.
- 1.2 The site consists of a large area of FC land, which slopes from Mynydd Gethin in the west towards the A470, which is located further to the east (See Plan 1 & Appendix 3). The site is largely upland, with semi upland areas along the eastern boundaries and lies between about 200m AoD along the eastern margin, rising to approximately 450m at the top of the ridge in the west.
- 1.3 Conifer plantations are extensive across the site, although areas of semi natural broadleaf woodland remain, particularly along streams that run through the site. Open areas within the plantations support marshy grassland, bracken stands and areas of heathland and acid grassland. A number of streams, including the Nant Cannaid and associated tributaries, run through the site in addition to acid flushes and pools that have formed where drainage is impeded. A disused quarry is present in the northern part of the site.
- 1.4 The site overlies Carboniferous shales and sandstones of the Upper Coal Measures. The soils that have developed over these rocks are generally acidic in nature, being wet and with a peaty surface where drainage is impeded, and freely draining and loamy on more steeply sloping ground. Rocky outcrops, which are a feature of the within the site, are surrounded by very thin and dry acidic soils.
- 1.5 The remainder of this report sets out the results of the ecological survey, together with an assessment of the biodiversity value of the habitats, features and species recorded against the Criteria for the selection of SINC in the ‘Mid Valleys Area’ (WBP 2008). These attributes are also assessed against the biodiversity conservation priorities set at the UK, Wales, County and County Borough level (BRIG 2007; WAG 2007; GlamBAG 1999; MTBP 2008).
- 1.6 A SINC boundary is proposed to enclose all of the land areas which are judged to meet one or other of the SINC designation guidelines.
- 1.7 **Designated Sites of Biodiversity Interest**
- 1.7.1 The site does not contain any statutory sites of nature conservation interest, such as Special Areas of Conservation (SACs), Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) or Local Nature Reserves (LNRs). Cwm Glo SSSI lies adjacent to the site (see Appendix 3). There are also a number of ‘County Wildlife Sites’ adjacent (See Appendix 6), which are non-statutory sites, recognised locally as Sites of Importance for Nature Conservation (SINCs).

Cwm Glo SSSI

- 1.7.2 Cwm Glo SSSI is located immediately to the north of the site. The SSSI is notified for its wet pastures and species-rich grasslands, and the mosaic of these habitats with woodland and heath. The site is important for its exceptionally diverse assemblage of grassland fungi, including 32 species of waxcap (*Hygrocybe* spp), making it one of the best sites in Britain for fungi.
- 1.7.3 SSSIs are 'National sites', being notified by CCW under section 28 of the Wildlife and Countryside Act 1981. SSSI are areas of land which support flora, fauna, geological or physiographic features of special interest.

County Wildlife Sites

- 1.7.4 To the immediate north/north west of the site is Winchfawr West SINC. The SINC is designated for its mosaic of moorland and ffridd habitats, on the eastern slopes of the Bryn y Gwyddel/Bryn y Badell/Mynydd Aberdar hill system. Habitats comprise wet and dry heathland, which provide the most extensive coverage in the county. Other habitats include acid grassland, marshy grassland, acid flushes, scrub, streams and ponds.
- 1.7.5 To the north of the site, Cwm Glo SINC is contained within the SSSI, as described above in paragraph 1.6.2. The SINC comprises extensive mosaic of ffridd habitat supporting semi upland and lowland vegetation. The majority of habitat is acid grassland, with extensive areas heathland in addition to other habitats including marshy and neutral grassland, bracken, acid flushes and small ponds and streams, largely lined with semi natural broad leaved woodland.
- 1.7.6 Blaencanaid SINC is present to the immediate north/north east of the site. The SINC comprises areas of acid and marshy grassland with wet woodland, hedgerows and conifer plantations.
- 1.7.7 Rhydyar West SINC is located to the north/north east of the site and comprises ancient semi natural woodland fragments as well as semi natural broad leaved woodland, wet woodland, conifer woodlands and areas of heathland, marshy and neutral grasslands. There are also areas of scrub, bracken and ponds.
- 1.7.8 Immediately to the east of the site is Cwm Woods SINC. The SINC includes ancient semi natural oak and birch woodland contained within larger conifer woodland plantations. The site also supports associated habitats including bracken, heathland, scrub, marshy and acid grassland.
- 1.7.9 To the immediate east/south east of the site is Graig Gethin SINC. The SINC contains woodland slopes, supporting extensive semi natural oak woodland with bracken slopes and areas of bilberry and heath. Alder and birch woodland occur particularly along streams within the site. There are also areas of wet heath occurring along conifer woodland rides.
- 1.7.10 To the south/south east is Buarth Waunydd SINC. The SINC comprises semi upland ffridd habitat with marshy grassland, acid grassland and flushes, heath, bracken and

semi natural broad leaved woodland including wet woodland with alder. Other habitats include neutral grassland and scrub.

- 1.7.11 The Cnwc SINC is located immediately south of the site. The SINC supports semi upland ffridd habitat with bracken covered slopes and acid grassland with heath and bilberry on the mountain tops. Other habitats include semi natural woodland and mature trees in addition to marshy grasslands, acid flushes and wet heath in low lying areas. Two reservoirs are also present within the SINC.
- 1.7.12 County Wildlife Sites are one of a class of non-statutory nature conservation designations which are recognised throughout the UK under a wide range of titles. County Wildlife Sites are so-called ‘third tier’ sites, generally ranked below sites which are of international or national biodiversity significance, but which are considered to have substantive nature conservation value in the sub-national (ie regional or district) context. They are usually designated at the county or county borough level by the relevant local planning authority, and are recognised as a planning constraint in the relevant statutory development plan. The framework for the identification and designation of ‘Wildlife Sites’ is set out in various Government documents, and is referred to in *Planning Policy Wales* (2011) and *Technical Advice Note (Wales) 5: Nature Conservation & Planning, 2009*.

2.0 METHODS AND APPROACH

- 2.1 The study area was surveyed on 21 and 27 November 2012, and was subject to an Extended Phase 1 survey as recommended by the Institute of Environmental Assessment (IEA 1995). This was based on the Phase 1 vegetation classification methodology developed by the former Nature Conservancy Council (NCC 1990), a nationally-accepted and standard method for the rapid survey and appraisal of ecological habitats which is based primarily on the recording of vegetation and its classification into defined habitat categories. Dominant and conspicuous flora species were recorded and 'target notes' were prepared for any features of particular interest.
- 2.2. The methodology also requires the recording of conspicuous fauna species such as birds, herptiles (i.e. amphibians and reptiles), mammals and invertebrates such as butterflies and dragonflies, paying particular attention to the presence (or possible presence) of any rare or protected species.
- 2.3 The methodology for the assessment of the site is give at Section 4.0.

2.4 *Data Trawl*

- 2.4.1 In addition to original survey, a data trawl was carried out in order to obtain access to any existing information about the site which may be held by nature conservation bodies in the region. The bodies contacted included:
- Merthyr Tydfil County Borough Council (MTCBC)
 - South-East Wales Biodiversity Records Centre (SEWBReC); and
 - Forestry Commission (FC)

SEWBReC is the main repository for biological data and species records in the region.

3.0 SURVEY RESULTS

3.1 Vegetation and Habitats

- 3.1.1 The results of the vegetation and habitats survey are shown on Plan 1 of this report, and are described briefly below. Lists of the species recorded are given at Appendix 1. Representative photos are included in Appendix 2.

Notable Plants

- 3.1.2 Stag's-horn clubmoss (*Lycopodium clavatum*), a 'Priority species' for conservation in Wales, has been recorded in several locations across the site (SEWBRc data, 2012). Stag's-horn clubmoss is also listed as a 'Primary Species' within the South Wales and Mid Valleys SINC criteria (SWWSP 2004; WBP 2008) and its presence qualifies the site as a SINC. The site also supports royal fern (*Osmunda regalis*) and crowberry (*Empetrum nigrum*) (SEWBRc data, 2012), which are listed as 'Contributory Species' within the south Wales and Mid valleys SINC Criteria. Other species of interest in a regional/local context include ivy leaved bellflower (*Wahlenbergia hederacea*).

Notable Habitats

- 3.1.3 None of the habitats identified are considered to be of international or national importance. However, the site contains habitats such as lowland deciduous woodland, upland heathland and upland flushes, which are 'Priority Habitats' of the UK Biodiversity Action Plan (UK BAP: BRIG 2007) and its Welsh equivalent (WBP 2007).

Broadleaved Woodland

- 3.1.4 Semi natural broad leaved woodland, of varying character, is found largely to the north east of the site. These areas of woodland are comparatively small in size compared to the conifer woodland, in which they are contained.
- 3.1.5 Along the streams and tributaries running through the site, the woodlands are mature, dominated by alder (*Alnus glutinosa*) with frequent sessile oak (*Quercus petraea*) and occasional pedunculate oak (*Q. robur*). Ash (*Fraxinus excelsior*) and silver birch (*Betula pendula*) as well as downy birch (*B. pubescens*) occur occasionally. Hazel (*Corylus avellana*) and willows (*Salix* spp) also occur frequently throughout the understory, as well as occasional common hawthorn (*Crataegus monogyna*).
- 3.1.6 Where the land is low-lying, the mature oak woodland is wet, particularly near the streams (Target Note 1, Plan 1), and the ground flora supports a good abundance and diversity of herbs such as opposite-leaved golden-saxifrage (*Chrysosplenium oppositifolium*), creeping-jenny (*Lysimachia nummularia*) and wood sorrel (*Oxalis acetosella*). In these areas sedges and rushes are also frequent, including remote sedge (*Carex remota*) and soft rush (*Juncus effusus*). Mosses such as common haircap moss (*Polytrichum commune v. commune*) are abundant, and tufted hair grass (*Deschampsia cespitosa*) occurs frequently.

- 3.1.7 On drier slopes, oak forms the dominant canopy species and occurs along with frequent birch and occasional sycamore (*Acer pseudoplatanus*) and ash. The understory comprises largely hazel, which is distributed frequently throughout. In these areas the ground flora comprises abundant wood sorrel, herb-robert (*Geranium robertianum*) with occasional germander speedwell (*Veronica chamaedrys*), barren strawberry (*Potentilla sterilis*) and wood avens (*Geum urbanum*), amongst grasses such as creeping soft grass (*Holcus mollis*), Yorkshire fog (*Holcus lanatus*), rough meadow grass (*Poa trivialis*), sweet vernal-grass (*Anthoxanthum odoratum*), creeping bent (*Agrostis stolonifera*) and common bent (*Agrostis capillaris*), in addition to mosses and ivy (*Hedera helix*). Wavy hair-grass (*Deschampsia flexuosa*) is also abundant throughout, and bilberry (*Vaccinium myrtillus*) and ling heather (*Calluna vulgaris*) are locally frequent. Heath bedstraw (*Galium saxatile*) and tormentil (*Potentilla erecta*) also occur in these areas. A good diversity of ferns is present and include male-ferns (*Dryopteris* spp), polypody (*Polypodium* spp), soft shield-fern (*Polystichum setiferum*) and hard fern (*Blechnum spinant*), all of which occur frequently throughout these woodlands.
- 3.1.8 Larger areas are dominated by young birch woodlands, with abundant willow. The ground flora is dominated by dense bramble (*Rubus fruticosus* agg), with ferns and rushes.
- 3.1.9 There are also some small areas of mature beech (*Fagus sylvatica*) plantation, forming pure stands with typically sparse and species-poor ground flora. These areas support a patchy distribution of grasses such as common bent, Yorkshire fog and sweet vernal-grass, with occasional herbs such as herb-robert, wood sorrel and various ferns.
- 3.1.10 The broadleaved woodlands of the site collectively support at least 12 of the species which are listed as being indicative of ancient woodlands in the Mid Valleys SINC criteria (WBP 2008).

Conifer woodlands

- 3.1.11 Conifer plantations cover an extensive area within the site, comprising pure stands of larch (*Larix* spp), spruce (*Picea* spp), pines (*Pinus* spp) and, to a lesser extent, western hemlock (*Tsuga heterophylla*). The majority of these stands are mature plantations, although in some areas there is also some extensive young larch.
- 3.1.12 Where the plantations are mature, particularly in the stands of larch, there is a reasonably diverse ground flora including abundant grasses such as wavy hair-grass, Yorkshire fog, creeping bent, sweet vernal-grass and common bent, and ferns including *Dryopteris* spp, hard fern and soft-shield fern. Mosses form a dense mat across the woodland floor. Herbs include abundant wood sorrel, herb-robert and creeping buttercup (*Ranunculus repens*), with occasional speedwell (*Veronica* spp) and creeping jenny. Ivy is also abundant across the woodland floor, and bramble is locally frequent along with patches of rosebay willowherb (*Chamerion angustifolium*). The woodlands are often damp, and rushes such as soft rush and hard rush (*Juncus inflexus*) occur frequently. Sedges such as glaucous sedge (*Carex flacca*) also occur occasionally.
- 3.1.13 In the spruce plantations, the ground flora is generally less diverse as a result of dense shade created by this species. In these areas, the ground cover comprises largely needle litter, although there are occasional ferns, grasses and herbs similar to those described

above. Where rides were created through these areas, the ground flora is much more diverse being often damp, particularly along flushes where mosses are abundant, and forming dense hummocks mixed with tussocky grasses, including purple moor-grass (*Molinia caerulea*) and sedges, as well as occasional hard fern. Bilberry is locally frequent along the drier rides and woodland edges.

- 3.1.14 In some plantations, particularly the pine plantations to the north west of the site, bilberry occurs frequently throughout the ground flora, along with heath bedstraw and wavy hair grass. Ling heather is scarce but still found throughout, as well as tormentil which is found occasionally.
- 3.1.15 Young larch plantations also occur within the site, comprising young larch along with occasional young willow. Bramble and other tall ruderals such as rosebay willowherb dominate much of the ground flora, although along the edges and more open areas, a greater diversity of ground flora is evident. Ferns and rushes are frequent throughout these areas.
- 3.1.16 A large proportion of larch plantations, have been recently or were being felled at the time of the survey due to the presence of the fungus, *Phytophthora ramorum*. These areas were disturbed, crossed with muddy tracks and covered with piles of brash which comprised of tree branches and other vegetation, from the previously existing woodland.
- 3.1.17 An area of ancient woodland is located to the south east of the site (Sothorn 1986; see Appendix 3) (Target Note 2, Plan 1), which encompasses a larger area of woodland to the east. Parts of the ancient woodland appear to have been planted where it is within the site boundary but remains semi-natural immediately to the east.
- 3.1.18 The conifer woodlands of the site collectively support at least 9 of the species which are listed as being indicative of ancient woodlands in the Mid Valleys SINC criteria (WBP 2008).

Acid Grassland

- 3.1.19 Within the centre of the site there is an open area of semi improved acid grassland, which at the time of the survey was being grazed by horses. The sloping field comprises of common bent and sheeps fescue (*Festuca ovina*), with sweet vernal-grass, brown bent (*Agriostis vineale*), wavy hair-grass, Yorkshire fog and mat-grass (*Nardus stricta*). Heath rush (*Juncus squarrosus*) and sedges occur occasionally amongst the grasses. Herbs include heath bedstraw, tormentil and sheeps sorrel (*Rumex acetosella*). Bracken (*Pteridium aquilinum*) is present throughout the grassland, although locally frequent along with soft and hard rush. Bilberry and ling heather also occur occasionally throughout the grassland. Previous phase 1 surveys (Appendix 4), indicate that these areas are cleared conifer plantations which have subsequently developed into acid grassland.
- 3.1.20 Smaller areas of acid grassland also occur throughout the site within woodland and along woodland margins and paths, where they occur in a mosaic with heathland and bracken/ffridd habitat. Wavy hairy-grass is abundant, with common bent, sheeps fescue

and sweet vernal-grass. In these areas, bilberry is locally frequent occurring with ling heather occasional. Tormentil occurs scarcely.

- 3.1.21 The dry acid grasslands of the site collectively support at least 10 of the species which are listed as being indicative of species-rich acid grasslands in the Mid Valleys SINC criteria (WBP 2008). A further two acid grassland indicator species have also been recorded from other habitats on the site.

Neutral Grassland

- 3.1.22 Damp neutral grasslands occur along the margins of some of the tracks, bordering woodland. These areas comprise tall swards dominated by Yorkshire fog, common bent, red fescue (*Festuca rubra*), sweet vernal-grass, rye-grass (*Lolium perenne*), crested dog's-tail (*Cynosurus cristatus*), cock's-foot (*Dactylus glomerata*) and false oat-grass (*Arrhenatherum elatius*). Soft and hard rushes occur frequently, along with herbs such as creeping buttercup, self-heal (*Prunella vulgaris*), red clover (*Trifolium pratense*), ribwort plantain (*Plantago lanceolata*) and herb-robert. Common knapweed (*Centaurea nigra*) also occurs occasionally, along with other more ruderal species such as common ragwort (*Senecio jacobaea*) and creeping thistle (*Cirsium arvense*). In damper areas, cuckooflower (*Cardamine pratensis*) and wavy bitter-cress (*Cardamine flexuosa*) are also locally frequent.

- 3.1.23 The neutral grasslands of the site collectively support at least four of the species which are listed as being indicative of species-rich neutral grasslands in the Mid Valleys SINC Criteria (WBP 2008). One other neutral grassland indicator species has also been recorded from other habitats on the site.

Marshy Grassland

- 3.1.24 Marshy grassland is present along woodland clearings and in some areas bordering wet heathland. Along these clearings, where small tracks lead through dense woodland, the margins comprise abundant tussocks of purple moor-grass and rushes including soft and hard rush. Bilberry is also locally frequent, and herbs such as heath bedstraw occur frequently along with occasional tormentil. Ling heather is also locally frequent, and cross-leaved heath (*Erica tetralix*) also occurs in some areas, although only rarely.

- 3.1.25 Where adjacent to a network of ponds, other herbs are also frequent including cuckoo flower, greater bird's-foot trefoil (*Lotus pedunculatus*), lesser spearwort (*Ranunculus flammula*) and brooklime (*Veronica beccabunga*), along with jointed rush (*Juncus articulatus*) and a number of sedges (*Carex* spp).

- 3.1.26 The marshy grassland habitats of the site collectively support at least 10 of the species which are listed as being indicative of species-rich examples in the Mid Valleys SINC Criteria (WBP 2008). An additional five marshy grassland indicator species have also been recorded from other habitats on the site.

Bracken Communities

- 3.1.27 Open areas of grassland, such as those discussed above, support frequently-occurring bracken, which often forms a dense and continuous cover. Along woodland margins,

adjacent to tracks, bracken also forms dense stands amongst bramble. Other species associated with this habitat include rosebay willowherb, which is locally frequent.

Other Tall Ruderal Vegetation

- 3.1.28 Along parts of the tracks, and within one larger area adjacent to the quarry face, tall ruderal vegetation occurs. This comprises tall grasses such as false oat-grass and Yorkshire fog, growing amongst ragwort, tufted hair-grass, soft rush, hard rush, great willowherb (*Epilobium hirsutum*) and rosebay willowherb. These areas are scattered with young bushes of willow, broom (*Cytisus scoparius*) and common gorse (*Ulex europaeus*).

Dry Heathland

- 3.1.29 Dry heathland occurs along many of the tracks, forming wide margins adjacent to woodlands. Mature ling heather grows amongst hummocks of bilberry and mosses, with wavy hair-grass and heath bedstraw, and other species including common bent, sheeps fescue and tormentil. In some areas ling heather is less abundant and bilberry forms the most dominant dwarf-shrub species.
- 3.1.30 Along some tracks, ling heather occurs without bilberry and has a patchy distribution amongst grassland and tall ruderal vegetation. Ling heather also occurs throughout larger areas of acid grassland, as discussed above.

Wet Heathland

- 3.1.31 In the centre of the site, along the border with Rhondda Cynon Taff county borough, the site opens up into moorland comprising wet heathland. This habitat extends from the adjacent moorland into woodland rides within the site. These areas are dominated by tussocks of purple moor-grass with ling heather, and occasional cross-leaved heath and bilberry. Other species associated with this habitat include abundant hard and soft rushes, heath bedstraw, heath rush and abundant mosses.
- 3.1.32 Cross-leaved heath also occurs sparingly along tracks where the ground is damper, and grows with sedges, heath rush, soft rush and other short perennial species such as mouse eared hawkweed (*Pilosella officinarum*).

Acid Flush

- 3.1.33 Several small acid flushes occur within woodland clearings and at the margins of wet heathland habitats. These flushes are dominated by soft rush and purple moor-grass, overlying a carpet of moss. Associated species include violets (*Viola* spp), tormentil, lesser spearwort, marsh bedstraw (*Gallium palustre*) and sedges. Ivy leaved bellflower (*Wahlenbergia hederacea*) also occurs sparingly.

Ponds

- 3.1.34 Several ponds are present within the site. A network of ponds has formed near the quarry in the north west of the site (Target Note 3, Plan 1). In this area there are two larger ponds with open water and associated aquatic vegetation. Great reedmace (*Typha*

latifolia) is present along the edges, in addition to young willow and with abundant rushes around the periphery. Floating sweet-grass (*Glyceria fluitans*) also occurs occasionally along the edges and within the pond, and amongst the rushes there are marshy herb species such as lesser spearwort, marsh bedstraw, greater bird's-foot trefoil, cuckooflower and wavy bitter cress. Within the shallower parts of the pond, brooklime occurs with lesser spearwort, common starwort (*Callitriche stagnalis*), water crowfoot (*Ranunculus (Batrachium) sp*) and a forget-me-not species (*Myostis sp*).

- 3.1.35 Adjacent to these ponds, there is a large area of marshy grassland within which a number of pools and ditches have formed amongst hummocks of moss, purple moor grass and rushes.
- 3.1.36 A network of smaller ponds is also found towards the centre of the site (Target Note 4, Plan 1). A slightly larger pond is located adjacent to two smaller areas of open water. The larger pond supports abundant rushes around the open water, with several mature alder trees in one corner. Floating sweet-grass also grows around the pond, and water crowfoot and common starwort occur in the open water. Rushes dominate the two smaller ponds, which are much shallower and with less open water. It is possible that the smaller ponds are seasonal.

Streams & Ditches

- 3.1.37 A number of streams run through the site from west to east. The Nant Cwm Ddu runs along the southern boundary of the site, whilst the Nant Graig and Nant Cannaid have short sections within the eastern parts of the site to the north. There are a large number of smaller streams throughout the north eastern part of the site, which feed into the Nant Graig and Nant Cannaid.
- 3.1.38 Woodlands surrounding these streams, which comprise a rocky bed and, at the time of survey, fast flowing water with minimal aquatic vegetation.

Exposed Rock

- 3.1.39 Previous quarrying activity has exposed sandstone to form a small area of cliff face in the north west of the site. There is little vegetation on the steep cliff face, but abundant ferns grow along the bottom, amongst other tall ruderal vegetation. Several water bodies occur below the cliff face, as described above.

Short Perennial Vegetation

- 3.1.40 Along the majority of the tracks there is a narrow margin of short perennial vegetation. Species occurring in these areas includes coltsfoot (*Tussilago farfara*), mouse eared hawkweed, sedges such as glaucous sedge and grasses including Yorkshire fog, cock's-foot and creeping bent, as well as toad rush (*Juncus bufonius*).

Bare ground

- 3.1.41 A number of bare tracks run through the site, many of which are used regularly by vehicles and machinery associated with forestry operations.

Historic Records

- 3.1.42 Data was obtained from the Phase 1 habitat survey of the county which was undertaken by the former Nature Conservancy Council (NCC) during the period 1979-1997 (See Appendix 4). This earlier survey classified the majority of the site as being coniferous plantation with a small area of broad leaved plantation. There are also a number of areas with semi natural broad leaved woodland. Smaller open areas comprise continuous bracken, dry dwarf shrub heath, marshy grassland and semi improved acid grassland which in parts are scattered with scrub and a mixture of broad leaf and conifer trees. Bare ground and short perennial/ephemeral vegetation are also recorded.
- 3.1.43 The site remains largely the same today, with the majority of habitats mapped between 1979 and 1997 still remaining. The exception comprises some areas of conifer forestry that now appear to be broadleaved woodland, scrub and acid grassland/heathland mosaics, presumably due to felling at some point since the last survey or which are now open due to recent felling. Open areas previously shown as dominated by bramble and scattered scrub now appear to have developed into young scrub and broad leaved woodland.

3.2 **Fauna**

Mammals

- 3.2.1 There was no evidence of any protected mammal species recorded during the present survey of the site, although several species might be expected to occur. The site is considered potentially suitable for dormouse due to the extensive semi natural broadleaf woodland, partly within the site and also surrounding the site, which support a variety of potential food sources including hazel. The conifer woodland with the site could also potentially support dormouse, particularly where it is well connected to existing semi natural broadleaf woodland and remnant ancient semi natural broad leaved woodlands. However no records currently exist of dormouse either within or immediately adjacent to the site (SEWBRc data, 2012).
- 3.2.2 Water vole has been recorded in the past from within Cwm Glo SINC and SSSI immediately north of the site (SEWBRc data, 2012). Although there are a number of waterbodies present, these are considered to be unsuitable for water vole being limited in extent and supporting few features which are suitable for this species, as well as being subject to high levels of disturbance as a result of quarrying and forestry operations. Records of water vole are scarce within the county borough and the most recent records dated back to 2002.
- 3.2.3 No otter records exist from the site but they have been recorded within 500m, on the River Taff (SEWBRc data, 2012). Habitats within the site appear potentially suitable for otter. There are a number of streams and tributaries, connecting to the River Taff, which supported many mature broad leaved trees which could be suitable as otter holts. It is likely that otters would travel across the site whilst commuting and foraging, particularly utilising connective habitat features such as the streams and woodland.

- 3.2.4 Various species of bat, including common pipistrelle, noctule and brown long-eared bats, have been recorded within and adjacent to the site, either whilst foraging or commuting (SEWBRc data, 2012). The woodland within the site is likely to provide good foraging habitat and mature trees, which are numerous within the site, could potentially provide suitable roosting sites for bats. It is also possible that bats may roost within crevices in the quarry face.
- 3.2.5 Dormouse, water vole, otter and bats, and the habitats that support them, are all afforded protection under UK and EU legislation, including the Conservation of Habitats and Species Regulations 2010 and Wildlife and Countryside Act 1981. They are also listed as 'Priority Species' under the UK BAP and its Welsh equivalent, and are subject to Species Action Plans in the Merthyr Tydfil Local Biodiversity Action Plan (LBAP).
- 3.2.6 Evidence of badger activity has been recorded within the site (SEWBRc data, 2012) although no setts have been recorded. It is likely that badger would forage across the site, and there are potentially suitable habitats that would provide shelter for resting and breeding badgers. Badgers and their nesting burrows (setts) are fully protected in the UK under the Protection of Badgers Act 1992.
- 3.2.7 Other mammals of conservation concern recorded in the vicinity include brown hare, a UK and Welsh BAP 'Priority Species', which has been recorded on several occasions (SEWBRc data, 2012). The woodland and adjacent open areas of grassland are likely to provide good habitat for this species.

Birds

- 3.2.8 Thirty six species of bird have been recorded from the site to date. These include uncommon species such as tree pipit, nightjar, lesser redpoll, common linnet, common cuckoo, curlew, wood warbler, dunnock, common bullfinch, starling, song thrush, barn owl and lapwing, all of which are listed as 'Priority Species' in the UK BAP and its Welsh equivalent. Pied flycatcher, which is listed as a Priority Species in Wales, has also been recorded within the site.
- 3.2.9 Other birds of conservation concern in Wales and/or in the UK (RSPB, 2009 a & b) occurring within the site include long-tailed tit, meadow pipit, common swift, house martin, barn swallow, lesser black-backed gull, coal tit, green woodpecker, goldcrest, Eurasian woodcock, fieldfare, green sandpiper, willow warbler and mistle thrush.
- 3.2.10 A number of species protected under schedule 1 of the Wildlife and Countryside have been recorded, including barn owl, northern goshawk, green sandpiper, fieldfare and common crossbill. Nightjar and goshawk are known to have bred on the site in the recent past (M. Evans, pers comm, 2012) and it is thought likely that barn owl and common crossbill could also breed within the site.
- 3.2.11 Other specially protected or conservation-priority birds recorded within 500m of the site include spotted flycatcher, grasshopper warbler, merlin, Eurasian sparrowhawk, skylark, house sparrow and common kestrel, in addition to other species of conservation concern such as common redstart, mallard, sand martin and grey heron (SEWBRc data, 2012). It is likely that some of these species would also utilise at least some of the habitats present within the site on occasion.

- 3.2.12 Records of commoner species from the site include blackbird, blue tit, wren, chaffinch, carrion crow, robin, wood pigeon and tawny owl (M. Evans, pers comm, 2012).

Reptiles

- 3.2.13 No reptiles have been recorded from within the site, but there are records of common lizard adjacent to the site from within open areas of marshy grassland. Similar habitats exist within the site and it is therefore likely this species could occur, along with other common reptiles such as slow-worm. It is also possible that less common species such as grass snake and adder may also be found within the site.
- 3.2.14 All reptiles are afforded protection under the Wildlife and Countryside Act 1981, and are listed as 'Priority Species' under the UK BAP and its Welsh equivalent, and are included within the Merthyr Tydfil LBAP.

Amphibians

- 3.2.15 The rare and protected great crested newt has been recorded from numerous waterbodies from within the site and in habitats adjacent. It is possible that this species could breed within waterbodies present within the site. Great crested newt and its habitats are protected under EU and UK legislation, and are 'Priority Species' in both the UK and Welsh BAPs, as well as being subject to a Species Action Plan in the Merthyr Tydfil LBAP.
- 3.2.16 Records of other commoner amphibians, including common toad and palmate newt, exist from areas adjacent to the site. It is likely that these species, and others such as common frog, would occur in waterbodies within the site as well as in the slower running streams and ditches etc.

Fish

- 3.2.17 Brown trout, a UK, Welsh and LBAP species, has been recorded from the River Taff, located about 500m east of the site. It is possible that this and other resident and migratory fish may be found within streams on the site.

Invertebrates

- 3.2.18 The only available invertebrate record from within the site is that of red-necked footman moth (*Eutolmis rubricollis*), a species which is listed in the Merthyr Tydfil LBAP.
- 3.2.18 Marsh fritillary butterfly (*Eurodryas aurinia*), a species which is protected under Schedule 5 of the Wildlife and Countryside Act 1981 and listed as a 'Priority Species' within the UK BAP and its Welsh equivalent, occurs immediately adjacent to the site within the Cwm Glo SINC and SSSI. Other UK and Welsh BAP species are recorded from areas adjacent to the site, including small pearl bordered fritillary (*Boloria selene*), grayling (*Hipparchia semele*) and dingy skipper (*Erynnis tages*) butterflies and goat moth (*Cossus cossus*). Dark green fritillary (*Argynnis aglaja*), another Merthyr Tydfil LBAP species has also been recorded nearby.

- 3.2.19 Other invertebrates of conservation concern found adjacent to the site include a variety of bees, wasps and flies including *Bombus hortorum* (an LBAP species), *Andrena apicata*, *Andrena humilis*, *Andrena similis*, *Brachypalpus laphriformis*, *Cheilosia chrysocoma*, *Conops vesicularis*, *Didea fasciata*, *Dolichovespula saxonica*, *Methocha articulata*, *Nomada lathburiana*, *Nomada signata* and *Trypodendron signatum*, all of which are Red Data Book species, largely recorded from the nearby Cwm Bach mountain area (SEWBRc data, 2012).
- 3.2.20 A number of moths which are listed 'Priority Species' in the UK BAP and its Welsh equivalent for research have also been recorded from within the local area. These include grey dagger, knot grass, flounced chestnut, ear moth, dusky brocade, garden tiger, figure of eight, dark brocade, latticed heath, small heath, small square-spot, small phoenix, dusky thorn, grey mountain-carpet, autumnal rustic, garden dart, rustic, wall, brindled beauty, dot moth, broom moth, shoulder-striped wainscot, powdered quaker, white ermine, buff ermine, anomalous, hedge rustic, cinnabar, dark-barred twin-spot carpet and neglected rustic (SEWBRc data, 2012). It is possible that some of these, and/or other scarce and notable invertebrate species, may also occur on the site, particularly in the wet grasslands, heathlands and ancient wet woodlands.

4.0 ASSESSMENT OF THE SITE

- 4.1 There is currently no nationally accepted system for the categorising of sites or features of biodiversity significance below the level of national value, criteria for which are set out by the former Nature Conservancy Council (1989, as amended). However, guidelines for the identification of non-statutory sites of county significance (ie SINC)s are available for South Wales (SWWSP 2004), and there is also guidance for the identification of SINC)s in the Merthyr Tydfil county borough context which is based closely on the South Wales guidance (WBP 2008).
- 4.2 The following assessment of the biodiversity significance of the habitats and species of the Gethin Forest site is therefore based on comparison against the county and county borough SINC guidelines (SWWSP 2004; WBP 2008), and also makes reference to the conservation priorities listed in the Biodiversity Action Plans which have been produced for the UK, Wales and at the local level. The latter comprise published action plan priorities for both Merthyr Tydfil county borough (MTBP 2008) and the former Glamorgan county area (GlamBAG 1999), within which the majority of Merthyr Tydfil County Borough falls.
- 4.3 The assessment results are summarised in the following section and refer to the site as a whole. During the assessment process, however, all parts of the site were individually assessed.
- 4.4 The recommended Candidate SINC is shown at Plan 2. The boundary is considered to represent the definitive minimum boundary for any SINC designation in accordance with the survey data which is currently available.

4.5 Habitats

4.5.1 The habitats identified to date on the site are assessed against the UK, Welsh and local Biodiversity Action Plan priorities below, and any qualifying habitats are indicated together with any qualifications or notes. Where a Habitat Action Plan (HAP) is given for the habitat concerned in the Merthyr Tydfil Local Biodiversity Action Plan (LBAP), the reference number of this is also given.

4.5.2 The habitats are then assessed for qualification against the relevant habitat designation guidelines for SINCs in South Wales and Merthyr Tydfil County Borough.

Table 1: Assessment Against BAP Priorities

Habitats Represented on the Site	UK BAP Priority Habitat		Wales BAP Priority habitat		Glamorgan BAP Priority		Merthyr Tydfil LBAP Habitat Action Plan		
	Yes		Yes		Yes		Yes		
Semi natural Broad leaved woodland	Yes	a	Yes	a			Yes	Broad leaved woodland (HAP 1)	Lowland Mixed deciduous woodland and would also contribute to 'Ffridd' habitat (HAP 10)
Oak woodland	Yes	b	Yes	b	Yes	b	Yes	Broad leaved woodland (HAP 1)	Upland oak woodland and would also contribute to 'Ffridd' habitat (HAP 10)
Wet woodland	Yes	c	Yes	c			Yes	Broad leaved woodland (HAP 1)	Wet woodland
Broad leaved woodland plantation									
Conifer woodland plantation							Yes	Conifer woodlands (HAP 9)	Conifer woodlands
Semi improved acid grassland									Would contribute to 'Ffridd' habitat (HAP 10)
Semi improved neutral grassland									
Marshy grassland	Yes	d	Yes	d			Yes	Grassland (HAP 2)	Marshy grassland and 'Rhos' pasture and 'Ffridd' habitat (HAP 10)
Bracken									Would contribute to 'Ffridd' habitat (HAP 10)
Tall ruderal vegetation									
Dry heathland	Yes	e	Yes	e			Yes	Heathland (HAP 3)	Upland heathland
Wet heathland	Yes	e	Yes	e			Yes	Heathland (HAP 3)	Upland heathland and would also contribute to 'Ffridd' habitat (HAP 10)
Acid flushes	Yes	f	Yes	f			Yes	Wetland	

							(HAP 4)	
Ponds	Yes	g	Yes	g		Yes	Wetland (HAP 4)	
Streams and ditches	Yes	h	Yes	h		Yes	Rivers & streams (HAP 5)	
Rock exposure	Yes	i	Yes	i		Yes	Inland rock (HAP 8)	
Short perennial vegetation								
Bare ground								

- | | | | |
|---|--------------------------------------|---|----------------------------------|
| a | Lowland mixed deciduous woodland | b | Upland oakwood |
| c | Wet woodland | d | Purple moor grass & rush pasture |
| e | Upland heathland | f | Upland flushes, fens & swamps |
| g | Ponds | h | Rivers & streams |
| i | Inland rock outcrop & scree habitats | | |

4.5.3 ***Ffridd habitats*** (HAP 10): Fridd is a complex mosaic of habitats consisting of heath, bracken, acid grassland, woodland, coal spoil and rhos pasture. It is an important and characteristic habitat of the Merthyr Tydfil County Borough's valley sides, often stretching from one end of the Borough to the other.

4.6 Assessment Against SINC Designation Guidelines

- 4.6.1 The following section sets out the relevant SINC selection guidelines for each of the habitats identified at the Gethin site, together with an assessment of the degree of qualification by the site.

Guideline H1: Woodlands

The SINC designation guidelines for Mid Valleys state that the following should be considered for SINC selection:

All ancient woodlands as recorded in the Ancient Woodland Inventories, including Planted Ancient Woodlands (PAWS)

A small area of ancient semi natural woodland is located within the south east of the site. It appears to have been replanted and now comprises conifer plantation and open areas with a mosaic of acid and marshy grassland and bracken/ffridd habitat. Woodland in this area could be considered as Planted Ancient Woodland (PAW).

All semi natural woodlands over 0.25 ha which support an assemblage of ancient woodland indicators and/or semi natural woodland plant species
[referred to in Table 1 of the Guidelines: no threshold is set, but the number should be 'significant']

Semi natural broad leaved woodland is largely found in the north east of the site, where it lies adjacent to a larger area of remaining ancient semi natural woodland. This area of semi natural broadleaved woodland within the site supports at least 12 ancient woodland indicators.

All wet woodland sites over 0.25 ha with an assemblage of ancient woodland indicators or wetland ground floras

At least 9 ancient woodland indicator species occurred within areas of wet woodland found along streams within the site

All planted woodland over 0.25 ha that support an assemblage of ancient woodland indicators, or other species rich habitats

Conifer plantation supports at least 9 ancient woodland indicator species and planted broad leaved woodland supports at least 12 indicators. In both types of woodland, remnant heathland, acid and marshy grassland occurs. Although largely restricted to woodland tracks, margins and rides, these habitats also occur throughout some areas of woodland.

Smaller areas (less than 0.25 ha) of semi natural habitat or wet woodlands as SINC if they are either particularly species rich, support important faunas, or if they form part of a larger SINC designation, or complex of habitats, or fulfil a strategic linking function between SINC areas or other habitats

Smaller compartments of semi natural broad leaved woodland (such as stands of beech plantation, wet woodland, dry oak woodland and young developing woodland), occur within larger areas of conifer plantation but form part of the wider site habitat mosaic

All conifer plantations which support important species, or species assemblages, or which support habitats, which would qualify under other Habitat criteria (e.g. bogs or heathland)

Remnant heathland, acid grassland and marshy grassland as well as flushes, streams and ponds occur at least partly within conifer plantations but also forming separate habitats within the site.

At least 9 ancient woodland indicator species occur within conifer woodland habitat. Conifer woodlands also support at least 7 acid grassland indicators and 11 marshy grassland indicators. Largely these species were found along woodland edges and rides, but in some areas, occurred throughout the woodland.

Conifer woodlands support Stag horn club moss in addition to crowberry (which is present along woodland margins). The mosaic of mature conifer plantation woodland and clear fell, is important for breeding nightjar and other significant breeding birds (including goshawk) utilise the unique character of the conifer woodland.

Site qualifies under this guideline?

Yes

Guideline H2: Wood pasture, parklands, orchards and veteran trees

The SINC designation guidelines for Mid Valleys state that the following should be considered for SINC selection:

Parkland sites which derived from ancient woodland and continue to support large mature trees (often referred to as 'coedcae')

None present

Parkland sites, of whatever origin, containing good numbers of large over-mature trees

None present

Over-mature/veteran trees >3.7m circumference at 1.3m from base, or individuals that are estimated to be at least 200 years old which exhibit veteran tree characteristics such as rot hollow, bracket fungi or a large proportion of dead wood

Several mature trees present along streams, which could potentially be over 200 years old

Examples of orchards which are, or were, traditionally managed and which still contain several old fruit trees

None present

Site qualifies under this guideline?

No

Guideline H3: Scrub Communities

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

Structurally-diverse and species-rich mixed scrub sites over 1 ha in size
[minimum of six scrub species is suggested]

None present

Significant stands of gorse(over 1 ha in size) and/or stands which support key associated species

None present

Smaller stands of scrub (including less species rich areas) if they form an integral part of a larger SINC designation or complex habitat mosaics or fulfil a strategic linking function between SINC.

Several areas of scrub occur across the site where there is young woodland comprising largely young willow & birch and in some areas larch, which support bramble dominated ground flora. These form part of habitat mosaic within the wider site and provide important ecological connectivity for fauna present within the site.

Site qualifies under this guideline? Yes/borderline

Guideline H4: Neutral Grasslands

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

All example of crested dog's- tail- common knapweed grasslands (MG5) over 0.2 ha.

None present

All stands of species-rich MG1 and MG6 with at least 8 species from Table 2 and over 0.2 ha

None present

All stands of species-rich atypical NVC neutral grassland, with at least 8 species from Table 1 over 0.2 ha. In particular important grassland communities, which occur on road verges, brown field sites, are often not easily referable to NVC community

None recorded

From Table 8, any grassland site which supports a population of rare or very restricted species in the Mid Valleys area:

- Wood bitter vetch
- Moon wort
- Soft- leaved sedge
- Meadow saffron
- Dyer's greenweed
- Adder's-tongue fern
- Green winged orchid

- Greater butterfly orchid
- Meadow saxifrage
- Common meadow -rue

None recorded

The species poor MG10 grassland (which will rarely support 8 species from Table 2) will be designated where it either occurs as large areas or wet semi improved grassland, where it creates a linking function between other habitats, or forms part of a habitat mosaic (often in association with marshy grassland communities

None present

The South Wales Guidelines identify that all stands of MG4, MG11, MG12 and MG13 will be considered for SINC designation. Currently there are no records of these four communities in the Mid Valleys area, however if any sites are found then they will be designated as SINC if over 0.2 ha in size

None present

Smaller areas (less than 0.2 ha) of species-rich grassland, or larger stands (over 1 ha) of more species poor semi improved grassland if they form an integral part of a larger SINC designation or complex habitat mosaics or fulfil a strategic linking function between SINC

Species poor neutral grassland occurs along woodland tracks forming habitat corridors through the site and contributing to the mosaic of habitats within the site

Site qualifies under this guideline? Yes/borderline

Guideline H6: Acid Grasslands

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

All examples of unimproved acid grasslands over 0.2 ha

None present

All examples of semi improved acid grasslands over 0.5 ha, which retain a relatively high diversity of indicator species [the presence of at least 7 indicator species is suggested as a threshold, from Table 4 of the Guidelines]

An open area, near the centre of the site supports semi improved acid grassland with at least 10 acid grassland indicator species

Smaller areas (less than 0.5 ha) of unimproved or semi improved acid grassland if they form an integral part of a larger SINC designation or complex habitat mosaics or fulfil a strategic linking function between SINC

Semi improved acid grassland occurring along tracks/woodland margins forms mosaic with heathland/bracken and also part of habitat mosaic found on the wider site

Site qualifies under this guideline? Yes

Guideline H7: Marshy Grasslands

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

All areas of:

Blunt-flowered rush – marsh bedstraw fen meadow (M22)

Purple moor grass – meadow thistle fen meadow (M24)

Meadowsweet – wild angelica (M27)

None present

All examples of species rich M25 over 0.2 ha, which include 12 species in Table 5 and all stands of M25 (8 species from Table 5) over 0.5 ha [the presence of at least 12 indicator species is suggested as a threshold, from Table 5 of the Guidelines]

Areas of marshy grassland across the site support at least 10 indicator species

All stands of marshy grassland (and associated dry grassland habitats), which have been identified as potential, suitable or good condition marsh fritillary habitat

None recorded

*Smaller areas of marshy grassland if they form an integral part of a larger SINC designation or complex habitat mosaics (including wet heath) or fulfil a strategic linking function between SINC*s

Marshy grassland occurs along woodland tracks/margins and within rides particularly where acid flushes are also found and form part of wider habitat mosaic

Site qualifies under this guideline? Yes/borderline

Guideline H9: Ffridd Communities

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

All large stands of ffridd over 10 ha

None present

Smaller stands of species-rich bracken habitat, including violet-rich fritillary butterfly habitat

None present

*Smaller areas of ffridd if they form an integral part of a larger SINC designation or complex habitat mosaics or fulfil a strategic linking function between SINC*s

Small areas of Ffridd are scattered across the site, contributing to mosaic of habitats within the site. These areas are likely to be important for species such as tree pipit, winchat and cuckoo, known to be present within the site.

Site qualifies under this guideline? Yes/borderline

Guideline H10: Heathlands & Grass-Heath Communities

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

All examples of unmodified wet heathland and wet grass-heath, and where cross-leaved heath is still present even though reduced in its cover due to grazing pressure

Wet heath occurs within upland areas of the site in mosaic with moorland habitat including marshy grassland. Cross leaved heath is scarce within this habitat on the site.

All examples of unmodified dry heathland

None present

Examples of degraded heathland, secondary heathland and grass-heath mixtures which either meet the guidelines for designation as acid grassland (and are thus designated as such) or which have at least 10% dwarf shrub heath cover

Dry heathland comprising large stands of mature ling heather occurs frequently along majority of woodland margins/tracks and also throughout some areas of conifer plantation and broad leaved woodland, where areas of existing heathland appear to have been replanted. Dry heath also occurs in mosaic with acid grassland in the open field in the centre of the site and along tracks. Heather makes up at least 10 % of dwarf shrub cover within acid grassland fields/and along tracks within the site

Site qualifies under this guideline?

Yes

Guideline H12: Bog Habitats & Flushes

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

All examples of undegraded bog habitats

None present

All degraded bog habitats with the potential for restoration or which support some distinctive features of the habitat type

None present

Individual neutral, basic or acid flushes of any size, provided they are not grossly modified by agricultural improvement

The site contains numerous acid flushes which have not been grossly modified

Site qualifies under this guideline?

Yes

Guideline H15: Watercourses

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

All examples of stretches of main river where the river bed and banks remain comparatively unmodified and the water is not grossly polluted

None present

All examples of stretches of smaller watercourses (ie streams, canals, brooks etc) which are comparatively unmodified within the last 100 years, which support good aquatic, emergent or bankside plant communities, and the water is not grossly polluted [‘good’ plant communities are defined in the Guidelines]

Site contains a section of the Nant Cwm Ddu Graig and Canmaid and other minor watercourses. These appear largely unmodified and are flanked by ancient wet woodland. Water appears to be unpolluted.

All examples of system of reens and/or ditches with a diverse aquatic flora and/or fauna (including the associated habitat, e.g. field systems on river floodplains)

None present

All stretches of watercourses which support protected species, including otter and water vole

None recorded but the stream could potentially support otter

Site qualifies under this guideline?

Yes

Guideline H16: Standing open water

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

All examples of lakes and ponds which have largely unmodified, semi natural beds and banks, good water quality and/or which support good aquatic, emergent or bank side plant communities

A network of small ponds is present within the site

All examples of ponds which score ‘High’ or ‘Very High’ when assessed using methodology set out in the National Pond Survey (Pond Action, 1998)

Insufficient information

All ponds which qualify under individual relevant Species Criteria (flora, invertebrates, amphibians or birds)

Great crested newts have been recorded in at least one of the ponds

All less valuable ponds if they occur as integral features larger mosaic SINC

The pond network forms part of habitat mosaic within the wider site

Site qualifies under this guideline?

Yes

Guideline H18: Mineral Spoil Tips and Other Post Industrial Land

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

All examples of species-rich mineral spoil tips/post industrial lands that have naturally re-vegetated with a diverse range of native and archeophyte non woody plant species. The constituent habitats will be assessed against individual habitat criteria as set out in this document as part of a large mosaic SINC.

Small area that was previously quarried has now revegetated and supports mosaic of habitats including ponds, scrub and marshy grassland. Royal fern occurs in this area.

All examples of lichen heath on mineral spoil tips which support 8 key lichen-heath species identified in the Strategic Conservation Assessment of Heathland and Associated Habitats on the Coal Spoils of South Wales (Miller HS, Clarkson, B and Smith, PL., 2007)

None recorded

Site qualifies under this guideline? Borderline/Yes

Guideline H20: Mosaic Habitats

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

Any coherent site which comprises at least 3 distinct habitats types, where at 1one is approaching SINC selection status in its own right, providing that improved species-poor or degraded elements of low or negligible conservation interest do not form a significant proportion (ie >25%) of the total site area

The whole site readily qualifies under this guideline. Conifer plantation woodland, which makes up the largest proportion of the site, qualifies under the woodland criteria, due to the supporting a good assemblage of ancient woodland indicator species as well as species indicative of heathland and acid grassland. Other significant habitats which meet the criteria, although cover a much smaller area include semi natural broad leaf woodland, wet woodland and planted ancient woodland along with watercourses, open water, flushes acid grassland, dry and wet heathland. Smaller areas (which make up less than 25% of the site) including scrub along with neutral grassland, marshy grassland, bracken/ffridd, rock exposures and post-industrial land, form a mosaic with plantation woodland, and meet the criteria due to their role as connecting habitats across the site and contributing to the integral value of the whole site.

'block designations' of extensive areas of open countryside where semi-natural upland features predominate

NA

Site qualifies under this guideline? Yes

Guideline H21: Rock Exposures

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

All occurrences of limestone pavement, especially where supporting a rich gryke flora (i.e. mixtures of species characteristic of calcareous woodlands and grasslands, living within the cracks and furrows)

None present

Inland cliffs, crags and associated screes, where these support species of interest

The old quarries in the north west of the site have exposed acid rock which supports heathland and acid grassland species.

Site qualifies under this guideline? Borderline/Yes

Guideline H22: Other Features

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

Continuous sections of disused railway lines supporting semi-natural vegetation

None present

Continuous sections of green lanes and other linear features which have either more-or-less continuous semi-natural woody boundaries on both sides, or wide flowery verges and/or unsurfaced trackways

Grassland rich verges along roads and tracks across the site could potentially be considered as linear features within the site

All examples of areas where there are significant populations of ant hills and/or where several are estimated to be in excess of 50 years old [estimated by volume at 1litre of soil/year]

None present

Site qualifies under this guideline? No

4.7 Species

Guideline S1: Mammals

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

Any sites supporting breeding (or probable breeding) species (other than bats) which are listed as fully or partially protected on Schedule 5 of the Wildlife & Countryside Act 1981 (WCA), together with any areas which are critical for nesting, foraging, roosting (laying up), territorial or other significant use, will be selected. These species currently comprise water vole, otter, pine marten, dormouse and red squirrel

None recorded to date, although otter is likely to range along the stream

The presence of established breeding populations of the following species, which are nationally declining, regionally important or UK/LBAP Priority species or statutory protected species, together with any areas that are critical for nesting, foraging, territorial or other significant use are key associated species for SINC selection. These species comprise brown hare, harvest mouse, water shrew, yellow-necked mouse and badger.

Brown hare have been recorded within the site

The presence of breeding badgers is not, in itself, considered a valid reason for site selection. However, the presence of badger setts should be considered to be an additional supporting reason for the selection of sites which also qualify under other guidelines, ie on habitat grounds or for species other than badger.

Evidence of badgers has been recorded on the site, but breeding has not been confirmed

Any significant roosting sites [for bats] including vital flight and commuting routes and priority feeding areas attached to roosts. Also included should be any structures such as tunnels, icehouses, basements, gunnery emplacements, pill boxes etc which are used as roosts

None recorded to date, although it is likely that the mature trees and old quarries on the site support roosting bats

Also for consideration are any significant winter roosts (hibernation roosts) of any of the species listed in Table 8 [of the Guidelines]

Insufficient information

Site qualifies under this guideline? Yes/Borderline

Guideline S2: Birds

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

Sites supporting breeding populations, of any size, of species marked with an 'A' in Table 9 [of the Guidelines]

Goshawks have been recorded breeding within the site
Nightjar have been recorded breeding within the site and areas adjacent
Barn owl have been recorded within the site, and thought likely to be breeding

Sites supporting wintering or passage refuelling populations, of any size, of species marked with an 'A' in Table 10 [of the Guidelines]

Barn owls have been recorded within the site during the winter

Any site with 100 or more bird species recorded in the previous five years

Insufficient information

In addition all species on list 'B' will be identified as contributory features within a habitat

Birds listed as 'B' recorded within the site that are likely to be breeding and or overwintering include lesser redpoll, common linnet, raven, common cuckoo, pied flycatcher, common crossbill, green woodpecker, common bullfinch, stonechat, Eurasian woodcock, common starling, stonechat

Site qualifies under this guideline?

Yes

Guideline S3: Reptiles

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

All sites with adder or grass snake colonies

Insufficient information

In addition the occurrence of slow worm and common lizard will be considered a supporting reason for selection of a site, which also qualifies under other criteria (i.e. on habitat grounds or for species other than reptiles)

Insufficient information

Sites with significant populations of 1 or more reptile species will also be considered for selection

Insufficient information

Site qualifies under this guideline?

No

Guideline S4: Amphibians

The SINC designation guidelines for the Mid valleys state that the following should be considered for SINC selection:

Sites supporting four or more species of amphibian

Insufficient information

All great crested newt sites

Great crested newts have been recorded at several locations within the site

In addition the occurrence of any amphibian will be considered a supporting reason for selection of a site, which also qualifies under other criteria (i.e. on habitat grounds or for species other than amphibians)

Common toad, palmate newt and great crested newt recorded within the site

Sites with significant populations of 1 or more amphibian species will be considered for selection

Insufficient information

Site qualifies under this guideline?

Yes

Guideline S5: Fish

The SINC designation guidelines for the Mid valleys state that the following should be considered for SINC selection:

Water bodies supporting resident populations of any species listed in Table 11

None recorded

Watercourses regularly used as migratory routes by anadromous species listed in Table 11

Insufficient information

Site qualifies under this guideline?

No

Guideline S6: Invertebrates

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

Any site which supports a species which is listed in the UK Red Data Book [ie in the 'threatened' categories] or on the 'Section 42' list (WAG 2007)

Insufficient information

In addition, the occurrence of the following will be supporting reasons for the selection of a site which also qualifies under other criteria (i.e. on habitat grounds)

- *Any site which supports an important assemblage or population of 'Nationally scarce species'*
- *Any site which supports a species, recorded from 10 or fewer 10km grid squares in Wales*
- *Any site that supports a significant population or assemblage of LBAP priority species*

Insufficient information

Lepidoptera - Butterflies

Any site that supports a section 42 species and/or that fulfils the criteria for a Wales Action Plan Priority Species as shown in list 'A' in Table 12a

Sites will be considered for selection with 2 or more species from list 'B' in Table 12a, other LBAP species not already included or where 10 or more species of any butterfly occur (including common species)

Insufficient information

Lepidoptera - Moths

Any site that supports a section 42 species and/or that fulfils the criteria for a Wales Action Plan Priority Species as shown in list 'A' in Table 12b

Insufficient information

Sites that support significant populations or assemblages of species that fulfil the criteria for priority species in the Wales Action Plan, which are not already listed in Table 12b, will be considered for selection.

Insufficient information

Odonata – Dragonflies and Damselflies

Any site which supports a species from list 'A' in Table 13

Insufficient information

In addition, sites which support significant populations or assemblages of species in, list 'B' of Table 13 will contribute towards the designation of sites that qualify under criteria

Insufficient information

Orthoptera – Grasshoppers and allied insects

Any site which supports a species, which is 'Nationally scarce'

Insufficient information

Any site which supports a species from list 'A' in Table 14

Insufficient information

Any site which supports 3 or more species from list 'B' in Table 14

In addition the occurrence of species in list 'B' will be supporting criteria for selection of a site, as a species assemblage, which also qualifies under other criteria

Insufficient information

Site qualifies under this guideline?

No

Guideline S7: Vascular Plants

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

Any site with one or more 'primary' species present [Listed 'A' in Table 15 of the Guidelines]

Stag horn club moss has been recorded at several locations within the site

In addition the occurrence of a contributory species from list 'B' in Table 15 will be a supporting reason for selection of a site, which also qualifies under other Christmas criteria [listed in Table 16 of the Guidelines]

Crowberry and royal fern have been recorded within the site

Site qualifies under this guideline?

Yes

Guideline S8: Fungi

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

All grassland sites supporting 9 or more species of waxcap

Insufficient information

Any site which supports a species, which is listed in the UK Red data Book or as a section 42 species

Insufficient information

Any site that supports a species recorded from 10 or fewer 10km grid squares in Wales

Insufficient information

Any site that supports a species recorded from 3 or fewer sites within Vice Counties VC41 and VC35

Insufficient information

In addition the presence of UK BAP or LBAP Priority Species or nationally scarce or uncommon species will be a contributory features

Insufficient data

Site qualifies under this guideline?

No

Guideline S9: Mosses and Liverworts

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

Any site which supports a species that is listed in the Red Data Book for Mosses and Liverworts or as a Section 42 species

None recorded

In addition, any site that supports a species recorded from 3 or fewer sites within the Mid Valleys area, which supports a significant population of National or LBAP Priority Species, or which is scarce or local in the area will contribute to a SINC designation.

Insufficient information

Site qualifies under this guideline?

No

Guideline S10: Lichens

The SINC designation guidelines for the Mid Valleys state that the following should be considered for SINC selection:

Any site which supports a species that is listed in the Red Data Book for Lichens or as a Section 42 species

None recorded

In addition, any site that supports a species recorded from 3 or fewer sites within the Mid valleys area, which supports a significant population of National or LBAP Priority Species, or which is scarce or local in the area will contribute to a SINC designation.

Insufficient information

Site qualifies under this guideline?

No

4.8 Summary of Compliance with Guidelines

4.8.1 The following table summarises the compliance of the habitats and features of the site with the Guidelines for the Mid Valleys against which they have been tested.

Guideline	Subject	Compliance
H1	Woodlands	Yes
H2	Wood Pasture, Parkland, Orchards and Veteran Trees	No
H3	Scrub Communities	Yes/borderline
H4	Neutral Grasslands	Yes/borderline
H6	Acid Grasslands	Yes
H7	Marshy Grasslands	Yes/borderline
H9	Ffridd Communities	Yes
H10	Heath & Grass-Heath Habitats	Yes
H12	Bog Habitats & Flushes	Yes
H15	Watercourses	Yes
H16	Standing Open Water	Yes
H18	Mineral Spoil Tips and Post-Industrial Land	Yes/Borderline
H20	Mosaic Habitats and Common Land	No
H21	Rock Exposures	Yes
H22	Other Features	No
S1	Mammals	Yes/Borderline
S2	Birds	Yes
S3	Reptiles	No
S4	Amphibians	Yes
S6	Invertebrates	No
S5	Fish	No
S7	Vascular Plants	Yes
S8	Fungi	No
S9	Mosses and Liverworts	No
S10	Lichen	No

5.0 REFERENCES

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Wales Biodiversity Partnership (WBP 2008) *Criteria for the Selection of Sites of Importance for Nature Conservation in the County Boroughs of Blaenau Gwent, Caerphilly, Merthyr Tydfil & Rhondda Cynon Taff (The 'Mid-Valleys Area')*. Wales Biodiversity Partnership/Welsh Assembly Government.

Welsh Biodiversity Partnership (WBP 2007) *List of Species and Habitats of Principal Importance for the Conservation of Biological Diversity*. Welsh Government, Cardiff.

APPENDIX 1: SPECIES RECORDED

All species recorded by DCE 2012 unless otherwise indicated:
SEWBReC: Miscellaneous SEWBReC records

Flora

<i>Latin</i>	English names	Indicator species							Status	Source
		W	NG	CG	AG	MG	MST	TF		
<i>Acer pseudoplatanus</i>	Sycamore									
<i>Achillea millefolium</i>	Yarrow									
<i>Alchemilla spp</i>	A ladys mantle									
<i>Agrostis capillaris</i>	Common bent									
<i>Agrostis stolonifera</i>	Creeping bent									
<i>Agrostis vinealis</i>	Brown bent				x					
<i>Alnus glutinosa</i>	Alder									
<i>Anthoxanthum odoratum</i>	Sweet vernal grass									
<i>Arrhenatherum elatius</i>	False oat grass									
<i>Betula spp</i>	Birch species									
<i>Blechnum spinant</i>	Hard fern	x								
<i>Callitriche stagnalis</i>	Common water starwort									
<i>Calluna vulgaris</i>	Ling heather	x			x					
<i>Cardamine flexuosa</i>	Wavy bittercress									
<i>Cardamine pratensis</i>	Cuckoo flower		x			x				
<i>Carex flacca</i>	Glaucous sedge		x	x		x				
<i>Carex remota</i>	Remote sedge									
<i>Chamerion angustifolium</i>	Rose bay willowherb									
<i>Chrysosplenium oppositifolium</i>	Opposite leaved golden saxifrage	x								
<i>Cirsium arvense</i>	Creeping thistle									
<i>Cladonia spp</i>	Cladonia lichens									
<i>Corylus avellana</i>	Hazel									
<i>Crataegus monogyna</i>	Hawthorn									
<i>Cynosurus cristatus</i>	Crested dogs tail									
<i>Cytisus scoparius</i>	Broom									
<i>Dactylus glomerata</i>	Cocks foot									
<i>Deschampsia cespitosa</i>	Tufted hair grass									

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<i>Deschampsia flexuosa</i>	Wavy hair-grass	x			x					
<i>Digitalis purpurea</i>	Foxglove									
<i>Dryopteris affinis</i>	Scaly male fern	x								
<i>Dryopteris spp</i>	Male fern sp	x								
<i>Empetrum nigrum</i>	Crowberry							CS		SEWBreC data
<i>Epolibium spp</i>	Great willow herb									
<i>Erica tetralix</i>	Cross leaved heath					x				
<i>Fagus sylvatica</i>	Beech									
<i>Festuca ovina</i>	Sheeps fescue			x	x					
<i>Fraxinus excelsior</i>	Ash									
<i>Galium palustre</i>	Marsh bedstraw									
<i>Galium saxatile</i>	Heath bedstraw				x					
<i>Geranium robertianum</i>	Herb robert									
<i>Geum urbanum</i>	wood avens									
<i>Glyceria spp</i>	Sweet grass species					x				
<i>Hedera helix</i>	Ivy									
<i>Holcus lanatus</i>	Yorkshire fog									
<i>Holcus mollis</i>	Creeping soft grass									
<i>Huperzia selago</i>	Fir club moss									SEWBreC data
<i>Ilex ilex</i>	Holly									
<i>Isoetecium myosuriodes</i>	Mouse tail moss									
<i>Juncus articulatus</i>	Jointed rush					x				
<i>Juncus bufonius</i>	Toad rush									
<i>Juncus effusus</i>	Soft rush									
<i>Juncus inflexus</i>	Hard rush									
<i>Juncus squarrosus</i>	Heath rush				x	x				
<i>Kindbergia praelonga</i>	Common feather moss									
<i>Larix kaempferi</i>	Japanese larch									
<i>Lolium perenne</i>	Perennial rye grass									
<i>Lotus pedunculatus</i>	Greater birds foot trefoil						x			
<i>Lycopodium clavatum</i>	Stag horn clubmoss				x				PS	SEWBreC data
<i>Lysimachia nummularia</i>	Creeping jenny						x			
<i>Molinia caerulea</i>	Purple moor grass						x			
<i>Myostis spp</i>	Forget me not									
<i>Nardus stricta</i>	Matt grass				x					
<i>Osmunda regalis</i>	Royal fern						x		CS	SEWBreC data

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<i>Oxalis acetosella</i>	Wood sorrel	x								
<i>Picea sitchensis</i>	Sitka spruce									
<i>Polytrichum commune v. commune</i>	Common haircap moss									
<i>Polytrichum urn</i>	Urn haircap									
<i>Potentilla erecta</i>	Tormentil		x		x	x				
<i>Potentilla sterilis</i>	Barren strawberry	x		x						
<i>Pinus contorta</i>	Lodgepole pine									
<i>Pilosella officinarum</i>	Mouse ear hawkweed		x	x	x					
<i>Plantago lanceolata</i>	Rib wort plantain									
<i>Plantago major</i>	Broad leaved plantain									
<i>Pleurozium schreberi</i>	Red stemmed feather moss									
<i>Poa trivialis</i>	Meadow grass									
<i>Pogonatum urnigerum</i>	Urn haircap									
<i>Polypodium spp</i>	Polypody spp	x								
<i>Polystichum spp</i>	Shield fern spp	x								
<i>Prunella vulgaris</i>	Self heal									
<i>Pteridium aquilinum</i>	Bracken									
<i>Quercus petraea</i>	Sessile oak	x								
<i>Quercus robur</i>	Pedunculate Oak									
<i>Ranunculus flammula</i>	Lesser spearwort					x				
<i>Ranunculus fluitans</i>	Water crowfoot species									
<i>Ranunculus repens</i>	Creeping buttercup									
<i>Rubus fruticosus</i>	Bramble									
<i>Rumex acetosella</i>	Sheeps sorrel				x					
<i>Rumex spp</i>	Docks									
<i>Rhytidiadelphus squarrosus</i>	Springy turf moss									
<i>Salix spp</i>	Willow species									
<i>Senecio jacobaea</i>	Ragwort									
<i>Stellaria media</i>	Starwort									
<i>Taraxacum officinalis agg</i>	Dandelion									
<i>Thuidium tamariscinum</i>	Common Tamarisk-moss									
<i>Trifolium repens</i>	White clover									
<i>Trifolium</i>	Red clover		x							

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<i>pratense</i>										
<i>Tsuga heterophylla</i>	Western hemlock									
<i>Tussilago farfara</i>	Colts foot									
<i>Typha latifolia</i>	Bulrush									
<i>Ulex gallii</i>	western gorse									
<i>Urtica dioica</i>	Nettles									
<i>Vaccinium myrtillus</i>	Bilberry	x		x	x					
<i>Veronica beccabunga</i>	Brooklime					x				
<i>Veronica chamaedrys</i>	Germander speedwell									
<i>Viola spp</i>	Violet species									
<i>Wahlenbergia hederacea</i>	Ivy leaved bellflower					x				
	SWWSP 2004 'Indicator Species' Totals	12	5	5	12	15	0			
		W	NG	CG	AG	MG	MST	TF		

Key (Flora)

Status

RDB – Red Data Book

BAP – UK Biodiversity Action Plan Priority Species (UKSG 1995; UKBG 1998)

NT – Near Threatened

W&CA 1991 – Wildlife and Countryside Act: confers protection in UK context

PS – Primary Species in SWWSP (2004)

CS – Regionally Uncommon - Contributory Species in SWWSP (2004)

IA – Invasive Alien

Local – Local in Glamorgan

Indicator Species (Mid Valleys Criteria, MVSP 2008)

W – Woodland, NG – Neutral Grassland, CG – Calcareous Grassland, AG – Acid Grassland, MST – Mineral Spoil Tips

SINC Selection

Sites which support 8 neutral grassland, 8 calcareous grassland, 7 acid grassland or 12 marshy grassland indicator species should be considered for selection as a SINC.

Any site with one or more Primary Species should be considered for selection as a SINC, with the occurrence of Contributory Species, being a supporting reason for its selection

Birds

<i>Latin Name</i>	English Name	EU Birds Directive	Wildlife & Countryside Act	UK BAP	Wales BAP	UK BOCC	Wales BOCC	SINC Status (Breeding)	SINC Status (Wintering)	LBAP Species	Status on site	Source
<i>Aegithalos caudatus</i>	Long tailed tit		G				A				Common resident breeder	
<i>Ardea cinerea</i>	Grey heron		G								Common resident breeder, the only known heronries at Hensol and Treorchy and on the Gower	SEWBRcC
<i>Corvus corax</i>	Raven		G					B	B		Locally common resident breeder, especially in the uplands	
<i>Dendrocopos major</i>	Great spotted woodpecker		G								Common resident breeder	
<i>Falco peregrinus</i>	Peregrine falcon		1						B	MTCBC	Locally common resident; breeds in small numbers but continues to suffer persecution	SEWBRcC
<i>Garrulus glandarius</i>	Jay	2b	V								Common resident breeder and occasional passage migrant	
<i>Loxia curvirostra</i>	Common crossbill		1					B		MTCBC	Scarce resident breeder and passage migrant with occasional population irruptions	SEWBRcC
<i>Prunella modularis</i>	Hedge accentor		G	P	W	A					Common resident breeder	SEWBRcC
<i>Pyrrhula pyrrhula</i>	Common bullfinch		G	P	W	A	R	B	B	MTCBC	Common resident breeder	SEWBRcC

<i>Scolopax rusticola</i>	Eurasian woodcock	2A 3B	S				A	A	B	B		Uncommon resident, chiefly in upland woodlands, but also at coastal sites in winter, especially during hard weather; the number of 'roding' birds has declined in recent years	SEWBRcC
<i>Sitta europaea</i>	Nuthatch		G									Common resident breeder	
<i>Turdus philomelos</i>	Song thrush		G	P	W	R	A	B	B	MTCBC		Common resident breeder	SEWBRcC

Key (Birds)

EU Birds Directive 1979:

1 : Annex 1 species: special conservation measures apply

Wildlife & Countryside Act 1981: confers protection in UK context

G : Species protected under general provisions of WCA against killing, injury, capture and disturbance while nesting: protection extends to nests, eggs and young

S : Special cases: identified 'game' species which may be killed under licence in certain circumstances

V : 'Pest' species: may be killed or taken under licence in special circumstances

1 : Schedule 1: additionally protected by special penalties

UK BAP (Biodiversity Action Plan, 1995; 1998)

P : Priority Species

Wales BAP

W : List of Species & Habitats of Principle Importance for the Conservation of Biological Diversity (2003)

UK Birds of Conservation Concern: lists compiled by the bird conservation agencies (2009)

R : Red List: species of greatest concern

A : Amber List: birds of moderate concern

Wales Birds of Conservation Concern: lists compiled by the bird conservation agencies (2009)

R : Red List: species of greatest concern

A : Amber List: birds of moderate concern

SINC Status: lists compiled in *Guidelines for the Selection of Wildlife Sites in South Wales* (2004)

A : Qualifying species

B : Contributory species

LBAP

MT : Species listed in the Merthyr Tydfil Local Biodiversity Action Plan

Herptiles

Herptiles		European Protected Species	1981 Wildlife & Countryside Act	UK Red Data Book/ Nationally Scarce	UK BAP	Welsh BAP Priority	Merthyr Tydfil LBAP	Status on Site/Notes
<i>Triturus cristatus</i>	Great crested newt	Yes	5	LV/R	Prio	W	YES	

Key (Herptiles)

European Protected Species: *Habitats Regulations 1997*: highest level of protection

Wildlife & Countryside Act 1981: confers protection in UK context

5 : Schedule 5: full protection which includes places used for shelter and protection

5(pt) : Protection against killing, injury and sale

UK Red Data Book/Nationally Scarce: various sources - requires revision

R : Rare (Red Data Book)

V : Vulnerable (Red Data Book)

L : Locally (status varies depending on geographical location)

UK BAP (Biodiversity Action Plan)

Prio : Priority Species

Welsh BAP Priority

W : List of Species & Habitats of Principle Importance for Conservation of Biological Diversity in Wales (2003).

Merthyr Tydfil LBAP

MT : Species listed in the Merthyr Tydfil Local Biodiversity Action Plan

Invertebrates

Group/Species	Common Name	LBAP	Status / Notes	Source
<i>Atolmis rubricollis</i>	Red necked footman	YES	Locally distributed in south west England and Wales, within woodland	SEWBRcC

Key (Invertebrates)

UK BAP : UK Biodiversity Action Plan Priority Species

MT LBAP : Species listed in the Merthyr Tydfil Local Biodiversity Action Plan

SINC Status: lists compiled in *Guidelines for the Selection of Wildlife Sites in South Wales* (2004)

P : Qualifying species

C : Contributory species

APPENDIX 2: REPRESENTATIVE SITE PHOTOGRAPHS (November 2012)



1. View of main track, leading into north of site



2. View of mature larch woodland



3. View of beech plantation



4. View of track and marshy grassland margins



5. View of young larch plantation



6. View of bilberry along path



7. View of quarry face, and tall ruderal vegetation



8. View of pond (1) within quarry



9. View of pond (2) within quarry



10. Marshy grassland, ditches & pools in quarry



11. Young broad leaved woodland in NE of site



12. Marshy grassland under electricity pylons



13. Young broad leaved woodland adjacent to stream



14. Mature oak along stream



17. Mature BL woodland within conifer plantation



18. Young broad leaved woodland



19. Clear-fell area



20. Clear-fell area



21. Mature heather and bilberry along ride



22. Acid flush within woodland ride



23. Wet heathland



24. Marshy grassland/Rhos pasture along ride



25. View of pond (3)



26. View of pond (4)



27. View of acid grassland and heath mosaic



28. Stone wall within acid grassland/heath mosaic



29. Track through plantation in the south of the site



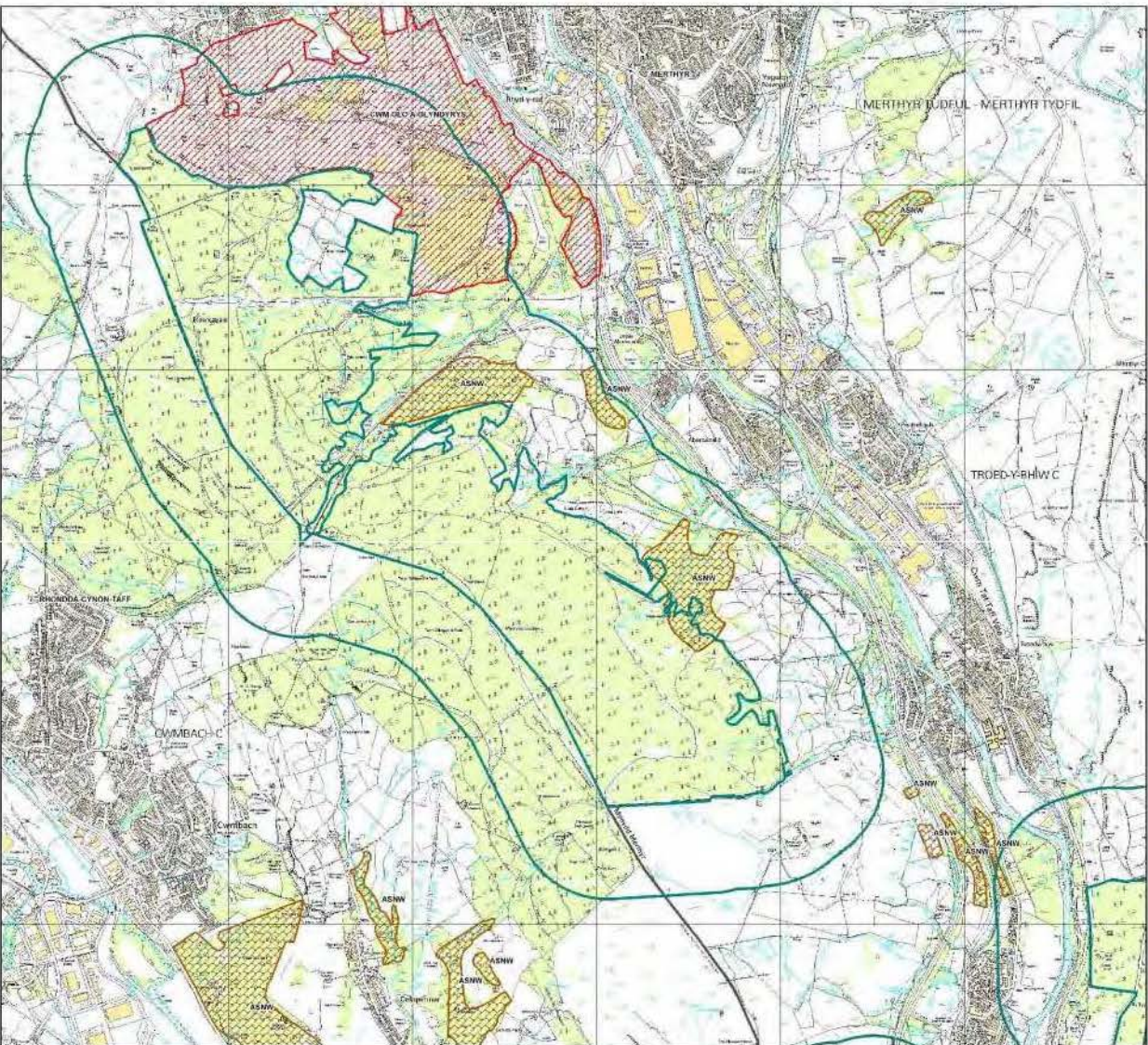
30. Cladonia lichen within bilberry and heather

APPENDIX 3: STATUTORY SITES WITHIN 500m (SEWBReC data, 2012)

BIODIVERSITY INFORMATION SEARCH (SPECIES AND DESIGNATED SITES):

MERTHYR TYDFIL CONIFER WOODLAND SINC SURVEYS DESIGNATED SITES PLOT 1

-  Search Area (plus 500m Search Buffer)
-  Site of Special Scientific Interest
-  Ancient Semi-Natural Woodland (ASNW)
Planted Ancient Woodland Site (PAWS)
-  Unitary Authority Boundary

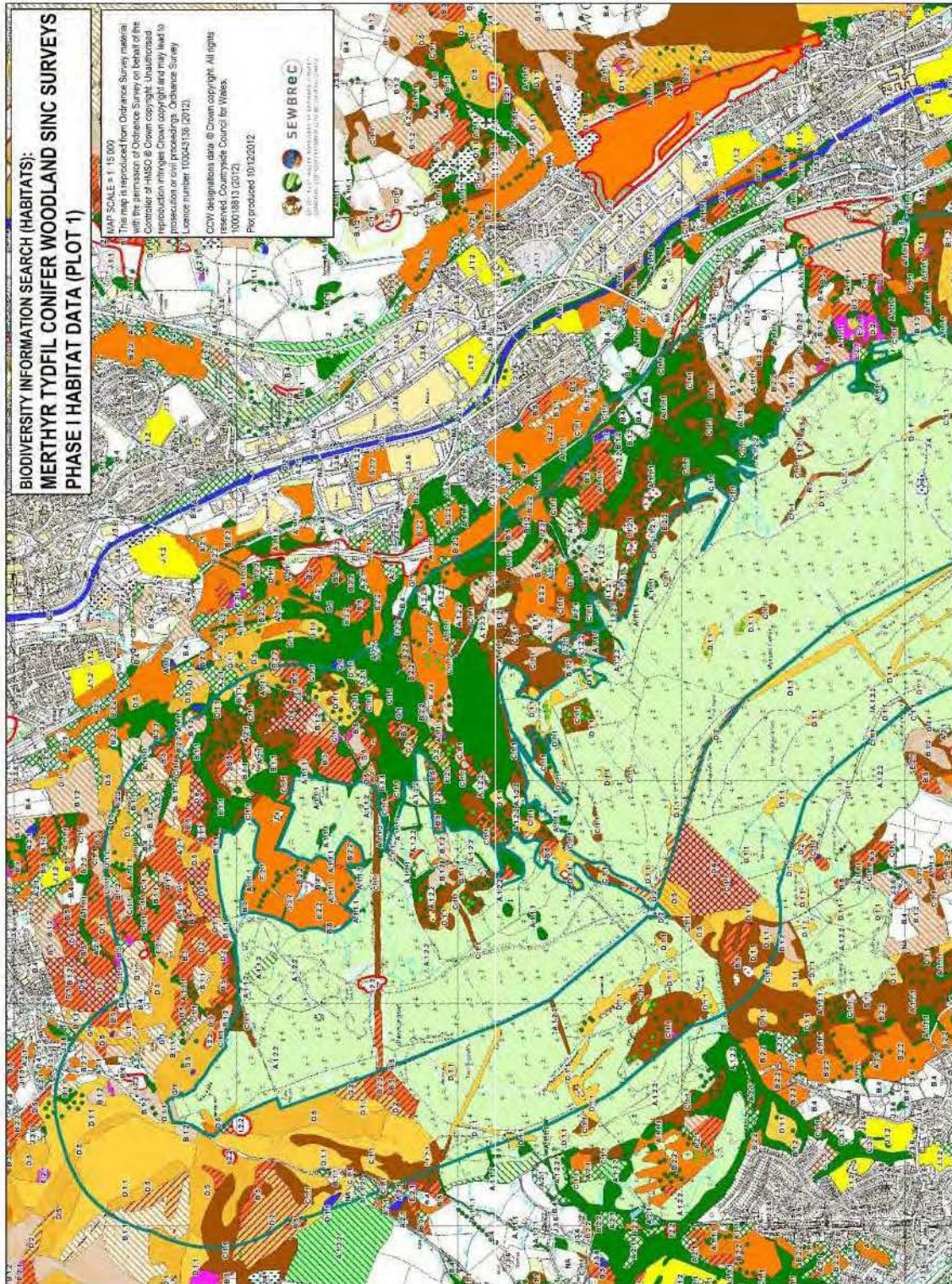


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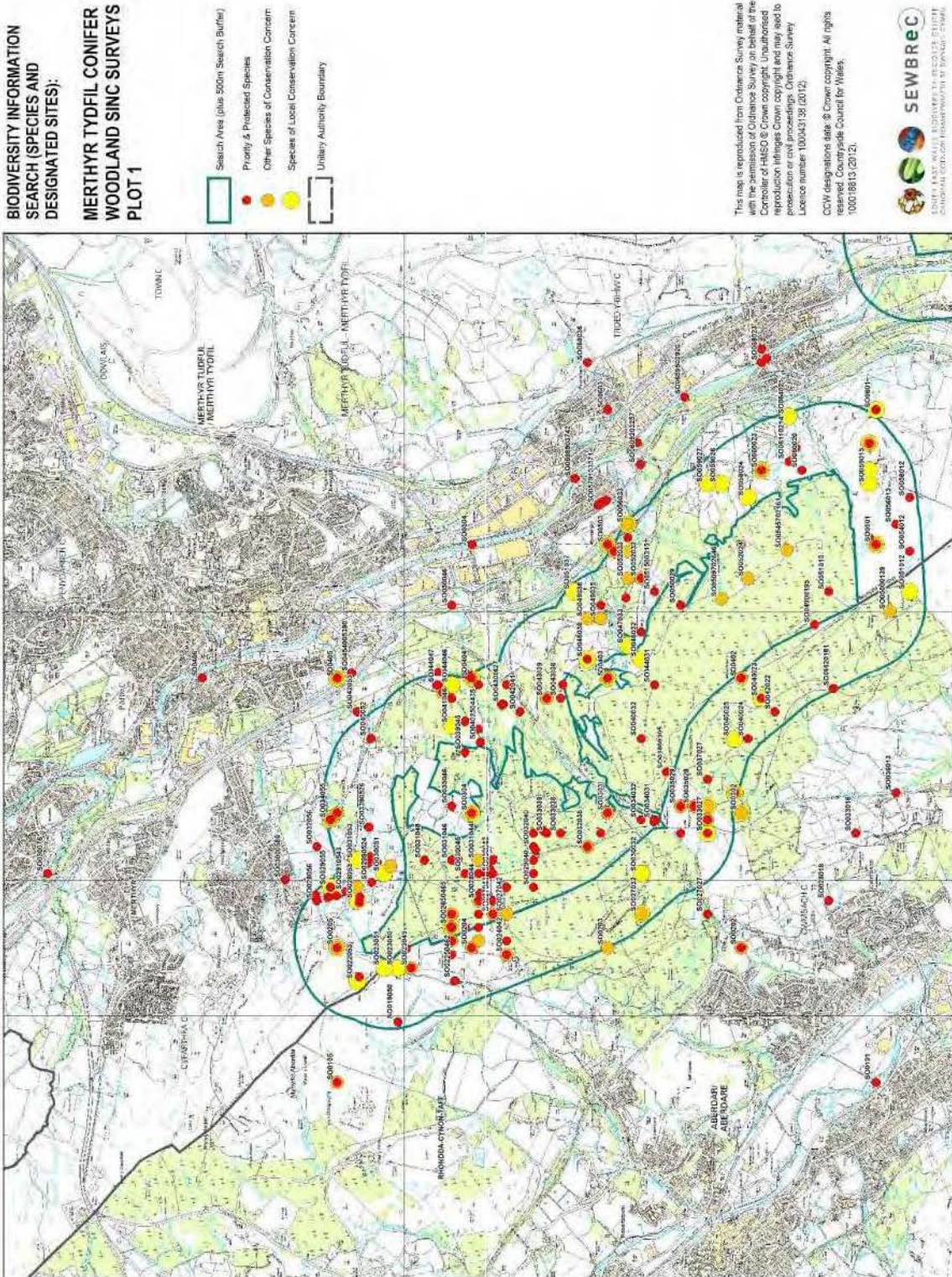
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APPENDIX 4: PHASE 1 HABITAT SURVEY (SEWBReC data, 2012)



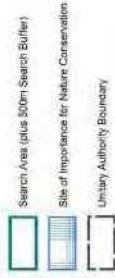
APPENDIX 5: SPECIES RECORDS WITHIN 500m (SEWBRc data, 2012)



APENDIX 6: NON STATUTORY SITES (SEWBRc data, 2012)

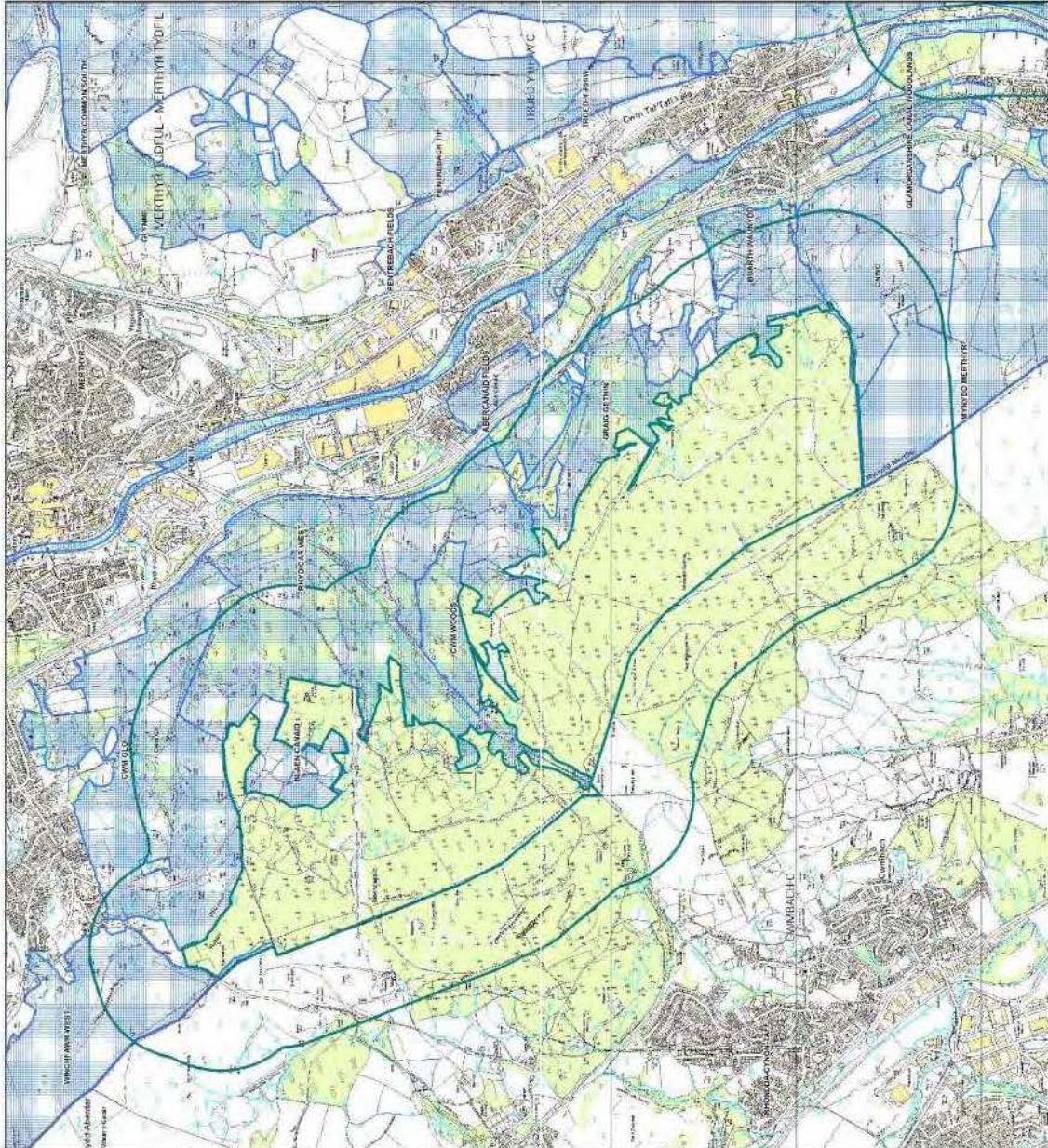
BIODIVERSITY INFORMATION
SEARCH (SPECIES AND
DESIGNATED SITES):

MERTHYR TYDFIL CONIFER
WOODLAND SINC SURVEYS
SINC'S PLOT 1



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Merthyr Tydfil SINC Assessment Survey

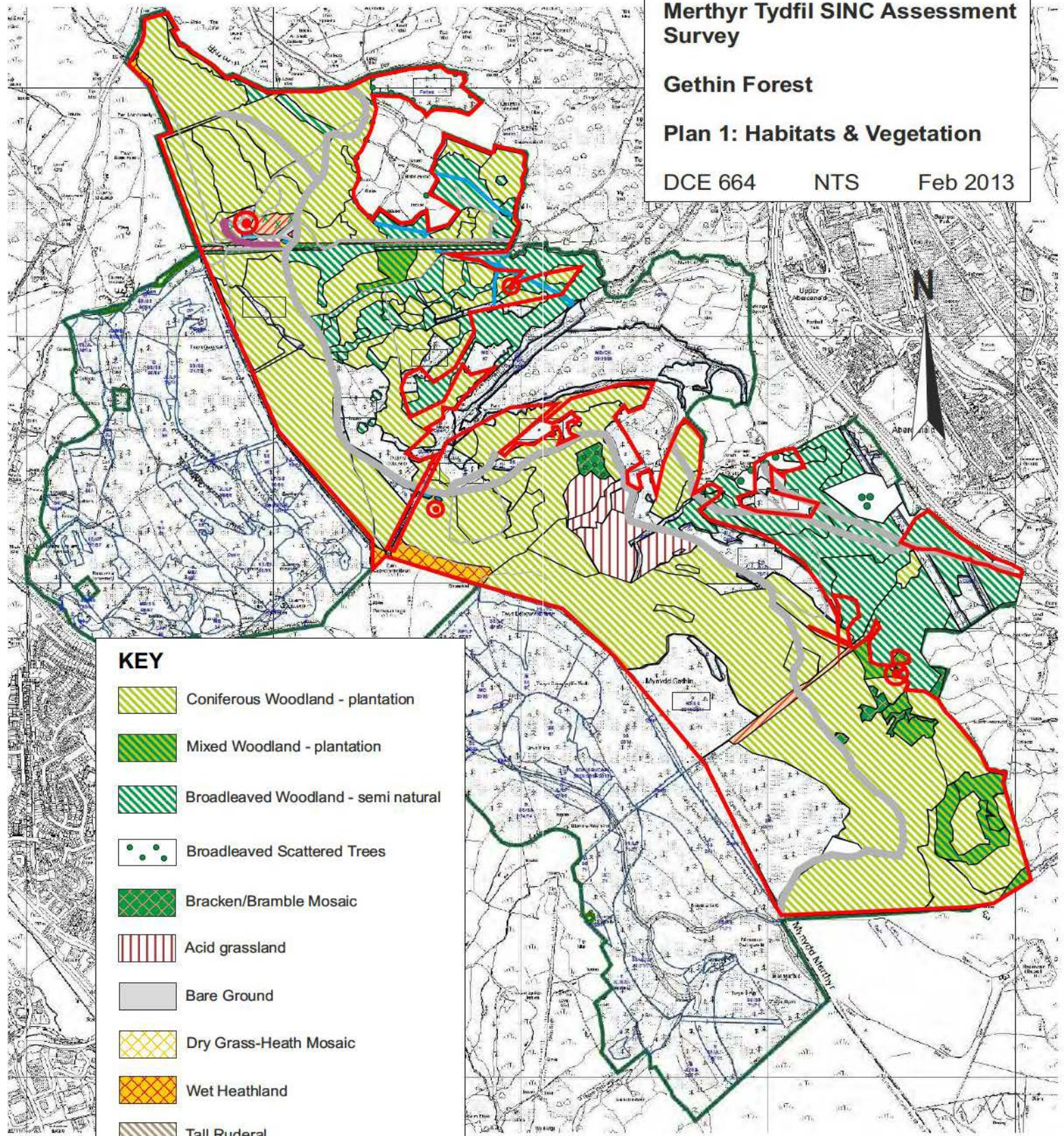
Gethin Forest

Plan 1: Habitats & Vegetation

DCE 664

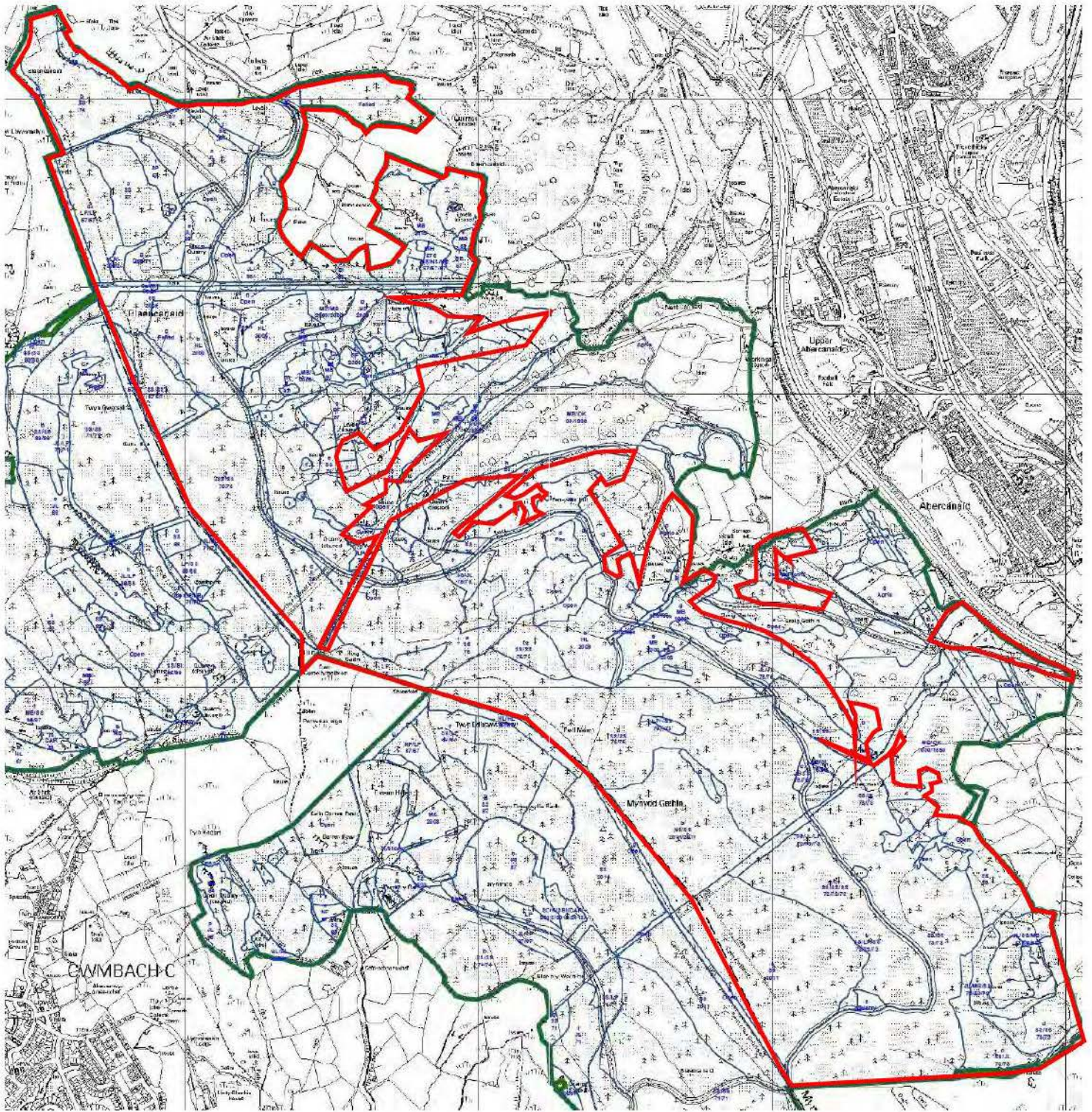
NTS

Feb 2013



KEY

-  Coniferous Woodland - plantation
-  Mixed Woodland - plantation
-  Broadleaved Woodland - semi natural
-  Broadleaved Scattered Trees
-  Bracken/Bramble Mosaic
-  Acid grassland
-  Bare Ground
-  Dry Grass-Heath Mosaic
-  Wet Heathland
-  Tall Ruderal
-  Marshy Grassland
-  Felled woodland
-  Open standing water
-  Stream
-  Quarry face
-  Target note
-  Site boundary



Merthyr Tydfil SINC Assessment Survey

Gethin Forest

Plan 2: Site Evaluation

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Proposed cSINC boundary