



**MERTHYR TYDFIL COUNTY BOROUGH
SITES OF IMPORTANCE FOR NATURE CONSERVATION
ST TYDFIL FOREST (WEST)
SURVEY & ASSESSMENT FOR SINC DESIGNATION**

February 2013

**David Clements Ecology Ltd
Carlton House, 5 Herbert Terrace, Penarth, Glamorgan, CF64 2AH
Tel: 029 20 350120 Fax: 029 20 711997
clements-d@dce.org.uk**

Site Name: ST TYDFIL WEST FOREST

Grid Ref(s):

ST 071 982 (W); ST 071 991(N); ST 076 981 (E); (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 site is considered to meet the SINC Criteria, for its mosaic of extensive conifer woodlands, areas of ancient woodland and semi natural broad leaved woodlands which support ancient woodland species in addition to heathland, acid and marshy grassland species/habitats – with some, particularly heathland species, persisting along woodland margins/tracks and open rides. Several flushes were recorded within rides through conifer plantations and a small pond is present to the north west of the site.

Between areas of forestry and ancient woodland, bracken/ffridd habitat occurs extensively across sloping land within the site, with small areas of heathland and acid grassland occurring where bracken is less dominant. Broad leaved trees (and occasionally conifer trees) are scattered across areas of bracken, with large areas of young birch and willow scrub, and other areas where mature oak are frequent.

A disused quarry provides a steep cliff face, with numerous ledges and associated scree and rocky outcrops, which are dominated by dry heathland and scattered trees.

Parts of the site also support a variety of interesting plants such as carline thistle (*Carlina vulgaris*) indicative of lime substrates, which have been deposited from previous industrial activities.

Peregrine falcon nest on the quarry cliff face. Other important bird species known to breed and or overwinter within the site include common crossbill, common bullfinch, raven, Eurasian woodcock and song thrush.

Meets SINC Selection Criteria No.s:

H1, H2, H3, H4, H7, H9, H10, H12, H18, H20, H21

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

Primary Features i.e. Qualifying criteria:

Mosaic Habitats (H2) Mosaic of semi upland habitats comprising conifer plantation, semi natural broad leaved, replanted ancient woodland, ffridd, heathland, rock exposures and supporting scrub, neutral grassland, marshy grassland, bog habitats and flushes, standing water, and post industrial land

Woodland (H1) replanted woodland with a range of semi natural woodland indicators, conifer woodlands that support remnant heathland/acid grassland mosaics, semi natural woodland with a range of ancient woodland indicators, ancient and planted ancient woodland

Ffridd (H9)

Heath and Grass heath (H10)

Rock Exposures (H21)

Secondary Features i.e. Contributory criteria: Scrub Communities (H3) Neutral Grassland (H4) Marshy Grassland (H7) Bog Habitats and Flushes (H12) Standing Water (H16) Mineral Spoil and Post-industrial land (H18) Birds (S1) Contributory species include raven, peregrine falcon, common crossbill, common bullfinch, Eurasian woodcock and song thrush			
UK BAP	Priority Habitats: Lowland mixed deciduous woodland Upland oakwood Upland heathland Purple moor grass and rush pasture Ponds Upland flushes, fens and swamps Inland rock outcrops and scree habitats Open mosaic habitats on previously developed land	Priority Species: Bats Dunnock Common bullfinch Starling Song thrush	
LBAP	Key Habitats: Broad leaved woodland Grassland Heathland Wetland Rivers and streams Inland rock Coniferous plantation Ffridd	Key Species: Peregrine falcon Common crossbill Common bullfinch Song thrush	
Protected Species: Peregrine falcon, common crossbill, bluebell			
Previously identified areas of interest contained within SINC: Parts of the site already identified within SINC's – Tarran y Gigfran and Craig Yr Efail.			
See continuation sheet:		See Confidential File:	Yes No
Other statutory/non-statutory wildlife sites contained by/adjacent to SINC: Tarran Y Grigfran Craig Yr Efail Afon Taf			
Additional notes: Further consideration should be given to including this site within a wider 'semi upland' SINC, integrating with adjacent SINC's Tarran y Gigfran and St Tydfil East, to strengthen its designation as a SINC			

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 'St Tydfil Forest (West)' 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 the whether this site is worthy of consideration as a SINC.
- 1.2 The site consists of an area of FC land known as St Tydfil West (See Plan 1). The site slopes down from the Mynydd Merthyr in the west towards the A470 to the east. The eastern boundary is bordered by the Taff Trail cycle route. The site can be described as a semi upland area which lies between about 150m AoD along the eastern margin, rising to approximately 320m AoD along the western margin.
- 1.3 Although conifer plantations make up the majority of the site, there are pockets of semi natural broadleaved woodland including remnant and planted ancient semi natural woodland, together with large areas of bracken with scattered trees and small areas of heathland. A large disused quarry also exists to the west of the site, which supports rock outcrops and areas of scree. There are no streams through the site, although a ditch runs part-way along the eastern boundary and flushes can be found within some of the woodland and on open rides. There are a number of tracks within the north of the site which support short perennial vegetation and acid grassland. To the east of the site, along the Taff Trail, there is also a small area of neutral grassland.
- 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.
- 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's 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; WBP 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). There are however a number of 'County Wildlife Sites' adjacent (See Appendix 6), which are

non-statutory sites recognised locally as Sites of Importance for Nature Conservation (SINC).

County Wildlife Sites

- 1.7.2 To the immediate north and partly within the site is the Tarran y Gigfran SINC. The SINC comprises of dry heathland with bilberry and ling heather, bracken covered slopes, dry acid grassland, semi natural oak and beech woodland, wet alder woodland and streams. SINC habitats that form part of the site include ancient semi natural and semi natural broad leaved woodland to the north east of the site, quarry with cliff face and scree supporting scattered trees and semi natural broad leaved woodland, as well as continuous bracken/ffridd habitat occurring with scattered trees, acid grassland and dry heathland.
- 1.7.3 To the south and partly within the site lies Craig yr Efail SINC. The SINC comprises semi-upland ffridd and hill top supporting bilberry heath, with bracken in addition to some replanted ancient semi-natural woodland dominated by beech, wet woodland, acid grassland, sandstone outcrops and quarries with associated screes. A small area of beech woodland within the north east of the SINC also forms part of the south west part of the site.
- 1.7.4 Further to the east lies the Afon Taf SINC. The SINC comprises the river and bankside vegetation. Habitats associated with the river corridor include semi natural broad leaved woodland, some of which is ancient woodland as well as marshy grasslands, bracken and tall herb vegetation.
- 1.7.5 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 13 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 (SEWBRc); and
- Forestry Commission (FC)

SEWBRc 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 No nationally rare or scarce species have been recorded within and or adjacent to the site. Ivy leaved bellflower (*Wahlenbergia hederacea*) has been recorded within the site (SEWBReC data, 2012), and is considered to be of regional/local interest.
- 3.1.3 Bluebell (*Hyacinthoides non-scripta*) is a species protected under schedule 8 of the Wildlife and Countryside Act 1981 with respect to trade, and has been recorded within the site.
- 3.1.4 Small cudweed (*Filago minima*) is listed as a 'Contributory Species' within the South Wales and Mid Valleys SINC criteria (SWWSP 2004; WBP 2008), and has been recorded adjacent to the site (SEWBReC data, 2012).

Notable Habitats

- 3.1.5 None of the habitats identified are considered to be of international or national importance. Several of the habitats, however, such as lowland deciduous woodland, upland heath and upland flushes are all 'Priority Habitats' listed under the UK Biodiversity Action Plan (UK BAP: BRIG 2007) and its Welsh equivalent (WBP 2007).

Broadleaved Woodland

- 3.1.6 Semi natural broadleaved woodland, including areas of ancient woodland occur across the site. Mature oak (*Quercus spp*) and beech (*Fagus sylvatica*) woodland occurs in an area immediately west of the Taff Trail, occurring over sloping ground on large sandstone outcrops. The canopy comprises beech, sessile oak (*Quercus petraea*) and pedunculate oak (*Q. robur*) and virtually no understory. The ground flora is sparse, particularly below areas which are predominantly beech, and supports frequent wavy hair-grass (*Deschampsia flexuosa*) and common bent (*Agrostis capillaris*), and occasional heath-grass (*Danthonia decumbens*), heath bedstraw (*Galium saxatile*) and wood sorrel (*Oxalis acetosella*). Where there is a higher proportion of oaks the ground flora also contains creeping soft-grass (*Holcus mollis*) and other species such as occasional bluebell (*Hyacinthoides non-scripta*), mosses and ferns. Occasional bracken (*Pteridium aquilinum*) also occurs in these areas, particularly amongst the oak canopy.
- 3.1.7 This semi-natural areas of woodland within the site, and further north, have been identified as ancient woodland (Sothorn 1986; see Appendix 3), (Target Note 1, Plan 1). An additional area is also identified as ancient woodland to the south-west of the site, although it appears to have been replanted with broadleaf trees, many of which

have since been killed by fire, in addition to the adjacent conifer plantations (Target Note 2, Plan 1). This area comprises planted mature beech, with occasional oak. The ground flora supports wavy hair-grass and bilberry (*Vaccinium myrtillus*), with occasional wood sorrel which is more frequent where oak occurs. There are frequent beech and birch saplings amongst the understory.

- 3.1.8 Similar oak and beech woodland occurs along the top of the quarry face, in the north-west of the site. The ground flora here includes sparse bilberry and wavy hair-grass, with occasional hairy wood-rush (*Luzula pilosella*), great wood-rush (*Luzula sylvatica*) and wood sage (*Teucrium scorodonia*).
- 3.1.9 The areas of semi natural broadleaved woodland described above currently fall within the adjacent existing Tarran y Gigfran SINC, and also the Craig Yr Efail SINC.
- 3.1.10 Mature oak, as well as alder (*Alnus glutinosa*), also grow along the eastern boundary of the site, along the conifer woodland margins, on banks adjacent to the Taff Trail. In addition, scattered mature oak occurs in other areas largely dominated by bracken and bramble (*Rubus fruticosus* agg).
- 3.1.11 The broadleaf 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 Woodland

- 3.1.12 Conifer plantations, including larch (*Larix* spp), spruce (*Picea* spp), pine (*Pinus* spp) and, to a lesser extent, western hemlock (*Tsuga heterophylla*) make up a large proportion of the site.
- 3.1.13 Across the site, areas of plantation usually comprise stands of single species, which are dense and support little ground flora. Grasses such as Yorkshire fog (*Holcus lanatus*), creeping bent (*Agrostis stolonifera*), common bent and wavy hair-grass occur occasionally in a patchy distribution with herbs such as wood sorrel and herb-robert (*Geranium robertianum*), ferns and mosses. Ivy (*Hedera helix*) and bramble also occur occasionally throughout these areas. Along woodland rides these ground flora species are more abundant, and other herbs such as hedge bedstraw (*Galium mollugo*), violet species (*Viola* spp), barren strawberry (*Potentilla sterilis*) and speedwell species (*Veronica* spp) also occur. In dense plantations which are damp, other species such as creeping jenny (*Lysimachia nummularia*) and tufted hair-grass (*Deschampsia cespitosa*) are also present.
- 3.1.14 In other areas, particularly the mature larch plantations to the north east of the site, the ground flora is rich in grasses with abundant wavy hair-grass, sheeps fescue (*Festuca ovina*) and common bent, occurring with heath bedstraw and wood sorrel, as well as mosses and ferns. In these areas, bilberry also occurs frequently. Along the tracks, herbs including wood sage and field woodrush (*Luzula campestris*) occur sparingly, along with ling heather (*Calluna vulgaris*). In some parts creeping soft-grass is also abundant along tracks and within areas of plantation.

- 3.1.15 Paths leading through these areas are often very damp, with frequent rushes (*Juncus* spp), tufted hair-grass, abundant mosses and ferns such as scaly male fern (*Dryopteris affinis*).
- 3.1.16 Several areas of the conifer woodland have been burned. The majority of the tree trunks remain standing but dead, and the ground flora beneath is dominated by dense bracken with abundant birch (*Betula* spp) and larch saplings.
- 3.1.17 The plantation woodlands of the site collectively support at least 10 of the species which are listed as being indicative of ancient woodlands in the Mid Valleys SINC criteria (WBP 2008).

Acid Grassland

- 3.1.18 Along tracks, often occurring in a mosaic with heathland, and within less-dense stands of bracken, acid grassland occurs. Typical species comprise common bent, tormentil (*Potentilla erecta*), bilberry, wavy hair-grass and sheeps sorrel (*Rumex acetosella*).
- 3.1.19 The dry acid grasslands of the site collectively support at least 6 of the species which are listed as being indicative of species-rich acid grasslands in the Mid Valleys SINC criteria (WBP 2008). Two other acid grassland indicator species have also been recorded from other habitats on the site.

Neutral Grassland

- 3.1.20 Along the eastern boundary, bordering the site and adjacent to the Taff Trail, there is a wide grassland verge. Grasses here comprise Yorkshire fog, rye-grass (*Lolium perenne*), red fescue (*Festuca rubra*) and cock's-foot (*Dactylus glomerata*). and broadleaf herbs such as herb-robert, ribwort plantain (*Plantago lanceolata*), creeping buttercup (*Ranunculus repens*), self-heal (*Prunella vulgaris*), white clover (*Trifolium repens*), red clover (*T. pratense*) and broad leaved willowherb (*Epilobium montanum*) are frequent. In parts, particularly adjacent to the watercourse, the grassland is damp and supports species such as wavy bittercress (*Cardamine flexuosa*), soft rush (*Juncus effusus*) and tufted hair grass. In some areas, bracken is also frequent.
- 3.1.21 The neutral grasslands of the site collectively support at least 7 of the species which are listed as being indicative of species-rich neutral grasslands in the Mid Valleys SINC Criteria (WBP 2008).

Marshy Grassland

- 3.1.22 Across the site there are a number of small areas of marshy grassland, such as beneath electricity pylons and along woodland clearings etc. In these areas, purple moor grass (*Molinia caerulea*) is abundant, with frequent soft rush and hard rush (*Juncus inflexus*), tufted hair-grass, sedges (*Carex* spp) and frequent herbs including marsh bedstraw (*Galium palustre*), lesser spearwort (*Ranunculus flammula*) and a water crowfoot species (*Ranunculus (Batrachium) sp*).

- 3.1.23 The marshy grassland habitats of the site collectively support at least 8 of the species which are listed as being indicative of species-rich examples in the Mid Valleys SINC Criteria (WBP 2008).

Bracken Communities

- 3.1.24 Large open areas surrounding the forestry support continuous bracken, often occurring together with bramble. In some areas, rosebay willowherb (*Chamerion angustifolium*) is also abundant. The ground flora is generally sparse, except where the bracken is less dense and other species characteristic of acid grassland are present. These typically comprise species such as common bent, tormentil, bilberry, wood sorrel, foxglove (*Digitalis purpurea*) and sheeps sorrel etc.
- 3.1.25 In some areas, such as beneath the electricity cables running through the site, young trees and scrub are locally abundant, including willow (*Salix* spp) and birch species. In other areas, such as adjacent to the Taff Trail and on sloping ground, mature oak are scattered, and bracken forms the majority of the surrounding ground flora except where rocky outcrops support species such as bilberry, ling heather and wavy hair-grass.
- 3.1.26 Bracken also occurs abundantly along woodland margins, adjacent to tracks leading through the site. Some of these areas, where they occur to the north of the site, form part of the existing adjacent Tarran y Gigfran SINC. The SINC supports areas of dense bramble in a mosaic with scattered trees and broadleaved woodland, and dry heathland associated with scree habitat.

Dry Heathland

- 3.1.27 Small areas of heathland are scattered across the site. In bracken-dominated slopes, ling heather occurs sparingly amongst bilberry, wavy hair-grass and heath bedstraw, together with mat-grass (*Nardus stricta*), usually on rocky outcrops. Small patches of ling heather also occur along tracks and on the margins of the conifer plantations.
- 3.1.28 Heathland also occurs within the quarry habitat to the north west of the site. Patches of ling heather grow around the rock outcrops and amongst patches of scree, together with bilberry, sheeps fescue, wavy hair-grass, heath bedstraw and great woodrush.
- 3.1.29 The majority of the heathland occurs to the north of the site, and is largely within the existing Tarran y Gigfran SINC.

Acid Flush

- 3.1.30 A number of small acid flushes occur within woodland clearings throughout the site. Rushes are abundant, with purple moor-grass, mosses and less frequent species such as marsh bedstraw, lesser spearwort, violet and sedges.

Ponds

- 3.1.31 A pond is present to north west of the site, amongst an area of conifer plantations. It is a small single pool surrounded by marshy grassland with abundant rushes, floating sweet-grass (*Glyceria fluitans*) and marsh bedstraw.

Streams & Ditches

- 3.1.32 A ditch runs along the eastern boundary of the site, adjacent to the Taff Trail. It supports floating sweet-grass, water crowfoot and rushes, with tufted hair-grass growing along its margins. It is culverted for parts of its length through the site. Numerous smaller streams and flushes run through the sloping woodland (west to east) into this ditch.

Exposed Rock

- 3.1.33 A large disused quarry lies in the north west of the site. This supports a mosaic of habitats. Along the top of the quarry face, mature oak woodland grows, and scattered oak and birch occur across ledges of the quarry. The quarry face and its ledges also support stands of ling heather and great wood-rush, as well as wood sage, wall pennywort (*Umbilicus rupestris*) and scaly male-fern within rock crevices. Below the quarry face, amongst scree, bracken is abundant with bilberry and ling heather occurring less frequently, together with scattered trees of birch, larch and pine. *Cladonia* lichens also occur.

Short Perennial Vegetation

- 3.1.34 Short perennial vegetation occurs along the margins of the majority of tracks running through the site. Species occurring in these areas include coltsfoot (*Tussilago farfara*), mouse eared hawkweed (*Pilosella officinarum*), sedges such as glaucous sedge (*Carex flacca*), grasses including Yorkshire fog, cock's-foot and creeping bent, and toad rush (*Carex bufonius*). Other species which are locally frequent occur in the centre of the site, including common centaury (*Centaureum erythraea*) and fairy flax (*Linum catharticum*), with scarcer carline thistle (*Carlina vulgaris*), indicative of basic influences in this area, possibly arising from previous industrial use of the land (Target Note 3, Plan 1).

Bare ground

- 3.1.35 There are numerous bare tracks which run through the site.

Historic Records

- 3.1.36 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. There are also a number of areas with semi natural broad leaved woodland, continuous bracken and acid dry dwarf shrub heath in addition to an area of open quarry with rock outcrops and scree.
- 3.1.37 The site remains largely similar today, with the majority of habitats mapped between 1979 and 1997 still remaining. The exception appears to be the areas of continuous bracken and dry dwarf shrub heath which now contain a higher proportion of trees, and which could be classified as either scrub or young woodland. Small areas of broadleaved woodland also appear now to be either bracken or scrub, suggesting that these areas have been felled since the original survey.

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.
- 3.2.2 No records currently exist of dormouse within or immediately adjacent to the site (SEWBrEC data, 2012). The site is considered to have limited potential for dormouse, although it is possible that this species might be present within the seminatural broadleaf woodland of the site. However, the understory is typically sparse or absent in many parts, with a limited amount of hazel. The conifer woodland could also potentially support dormice, particularly where it is well connected to existing semi natural broadleaf woodland and remnant ancient semi natural broad leaved woodlands.
- 3.2.3 Although a ditch runs along the eastern boundary of the site, it is shallow, with limited vegetation, and only appears to be open for a short distance before being culverted therefore providing limited suitable habitat for water vole. There are no previous records of water vole either from the site and or in the immediate area (SEWBrEC data, 2012).
- 3.2.4 No otter records exist from the site, but there are numerous records from the nearby River Taff, located to the east of the site (SEWBrEC data, 2012). There are few suitable habitats for otter within the site, and it is likely that the A470 which lies between the River Taff and the site would be a significant barrier to any movement of otters.
- 3.2.5 Several records of foraging and commuting by common pipistrelle and soprano pipistrelle bats exist from the Taff Trail where it runs along the eastern boundary of the site (SEWBrEC data, 2012). A pipistrelle roost has also been recorded in a house within 500m of the site. The woodland of the site is likely to provide good foraging habitat for several species of bats, and mature trees within the site could possibly provide suitable roosting sites. It is also possible that bats could roost within crevices in the quarry face.
- 3.2.6 Dormouse, water vole, otter and bats, and the habitats which 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, as well as being subject to Species Action Plans in the Merthyr Tydfil Local Biodiversity Action Plan (LBAP).

Birds

- 3.2.7 Twelve species of bird have been recorded from the site to date. These include, dunnock, common bullfinch and song thrush, all of which are listed as Priority Species in the UK BAP and in its Welsh equivalent. Other birds of conservation concern either in the UK or in Wales (RSPB 2009a/b) recorded from the site include long tailed tit and Eurasian woodcock. Peregrine falcon, which is protected under

Schedule 1 of the Wildlife and Countryside Act 1981, has also been recorded from the site, and is known to breed in the quarry.

- 3.2.8 Other specially protected or conservation priority species recorded within 500m of the site include tree pipit, common linnet, common cuckoo, pied flycatcher, Eurasian sparrowhawk, skylark, redwing, common kestrel and ring ouzel, in addition to other species of conservation concern including meadow pipit, house martin, barn swallow and green woodpecker, mallard and greylag goose (SEWBRc data, 2012). It is likely that at least some of these species also utilise the habitats within the site.

Reptiles

- 3.2.9 No reptiles have been recorded from within the site although suitable habitats occur. These could potentially support common species such as slow-worm and common lizard, perhaps as well as less common species such as grass snake and adder.
- 3.2.10 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. They are also included in the Merthyr Tydfil LBAP.

Amphibians

- 3.2.11 Common frog has been recorded from the site, and it is likely that other common species such as common toad and palmate newt also occur in the waterbodies such as ditches and the small pond etc.
- 3.2.12 There are no records of the rare and protected great crested newt for the site or within 500m. None of the habitats recorded during the survey were assessed as being suitable for this species, and the probability of its occurrence is assessed as low. Great crested newt, and the habitats which support it, is protected under EU and UK legislation, and it is a 'Priority species' in both the UK and Welsh BAPs, as well as being subject to an Action Plan within the Merthyr Tydfil LBAP.

Fish

- 3.2.13 Brown trout, a UK, Welsh and LBAP species, has been recorded from the nearby River Taff, located east of the site. It is possible that this and other resident and migratory fish could occur in streams present on the site.

Invertebrates

- 3.2.14 There are no available records of invertebrates for the site (SEWBRc data, 2012), and none were recorded during the survey.
- 3.2.15 A number of moths listed as 'Priority Species' for research have been recorded within the local area, including grey dagger, knot grass, flounced chestnut, ear moth, dusky brocade, garden tiger, 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 invertebrates, may also occur within the site, particularly in the wet grasslands, heathlands and ancient 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 (i.e. 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 (the 'Mid Valleys Criteria', WBP 2008).
- 4.2 The following assessment of the biodiversity significance of the habitats and species of the St Tydfil Forest (West) 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 cSINC is shown at Plan 2. The proposed SINC 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, 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 SINC's 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	a	Yes	a			Yes	Broad leaved woodland (HAP 1)	Lowland Mixed deciduous woodland and would also contribute to 'Ffridd' habitat (HAP 10)
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)
Lowland beech woodland	Yes	b	Yes	b	Yes	b	Yes	Broad leaved woodland (HAP 1)	
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	c	Yes	c			Yes	Grassland (HAP 2)	Marshy grassland and 'Rhos' pasture and 'Ffridd' habitat (HAP 10)
Bracken									Would contribute to 'Ffridd' habitat (HAP 10)
Dry heathland	Yes	d	Yes	d			Yes	Heathland (HAP 3)	Upland heathland
Acid flushes	Yes	e	Yes	e			Yes	Wetland (HAP 4)	
Ponds	Yes	f	Yes	f			Yes	Wetland (HAP 4)	
Streams and ditches	Yes	g	Yes	g			Yes	Rivers & streams (HAP 5)	
Rock exposure	Yes	h	Yes	h			Yes	Inland rock (HAP 8)	
Short perennial vegetation									
Bare ground									

- | | | | |
|---|----------------------------------|---|--------------------------------------|
| a | Lowland mixed deciduous woodland | b | Lowland beech and yew woodland |
| c | Purple moor grass & rush pasture | d | Upland heathland |
| e | Upland flushes, fens & swamps | f | Ponds |
| g | Rivers & streams | h | 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 St Tydfil West 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 to the north and south west of the site, is listed as ancient semi natural woodland. Whilst the area to the south appears to have been replanted with broad leaved woodland, to the north the ancient woodland has been retained (both areas are included in existing SINC – Craig yr Efail and Tarran Y Gigran).

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, which is found largely to the north of the site and lies adjacent to existing ancient semi natural woodland, supports overall 12 ancient woodland indicators.

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

None present

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

Areas of planted broad leaved woodland support at least 12 ancient woodland indicators, whilst planted conifers woodlands support at least 10. Both types of woodland also support heathland, marshy and acid grassland habitats although heathland is largely restricted to woodland margins and rides.

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

None present

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)

At least 10 ancient woodland indicators occurred within conifer woodland habitat. Largely these species were found along woodland edges and rides, but in some areas, occurred throughout the woodland. Conifer woodlands also supported acid grassland, marshy grassland and heathland habitats.

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 recorded

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.

Areas of less species rich scrub dominates open areas between forestry particularly in the south of the site. These form a mosaic of habitats 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 present

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 although 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]

Acid grassland occurs in mosaic with heathland and bracken/ffridd habitat and also within conifer and broad leaved woodland, supporting least 8 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*s

Acid grassland also occurs along some tracks through the site

Site qualifies under this guideline?

No

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]

None present

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

None present

*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

Small areas of purple moor grass and rush pasture present, occurring within mosaic with ffridd habitat in forestry clearings and as marshy grassland along woodland rides

Site qualifies under this guideline?

Yes

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 the mosaic of habitats within the site.

Site qualifies under this guideline? Yes/borderline

- 4.6.3 The draft Merthyr Tydfil County Borough SINC guidelines also specify that 'ffridd' habitats (ie semi-upland valleyside habitats containing complex mosaics of heathland, bracken, woodland, wet flushes, acid grasslands and scree) should also be considered for selection. The valleyside slopes in the south-west can be considered to comprise 'ffridd' vegetation.

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

None present

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 small stands of ling heather occurs occasionally along woodland margins/tracks and where rocky outcrops occur in a mosaic with acid grassland.

Site qualifies under this guideline? Yes/borderline

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 several acid flushes which have not been grossly modified

Site qualifies under this guideline? Yes/borderline

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]

None present

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

Site qualifies under this guideline? No

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 small pond was recorded in the north west of the site, which supported aquatic, emergent and bank side plant communities

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)

Insufficient information

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

The pond would contribute to the habitat mosaics within the site

Site qualifies under this guideline? Yes/borderline

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.

A large area to the north of site has been subject to quarrying activities, resulting in a diverse topography with steep cliff faces, numerous and associated scree. The cliff faces and scree support patchy heathland and other species indicative of acidic conditions. Areas of bare ground within the centre of the site also support a number of calcareous grassland indicator species, likely to be where lime rich substances, associated with past industrial activity, have been deposited.

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 present

Site qualifies under this guideline? Yes/borderline

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 and ancient/planted ancient woodland along with heathland, rock exposures and ffridd. Smaller areas (which make up less than 25% of the site) including scrub along with neutral grassland, standing water, marshy grassland bog habitats and flushes 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

Cliff face to north west of site and associated scree habitat, which support patchy heathland and other flora, indicative of acidic conditions. Also supports breeding peregrine falcon.

Site qualifies under this guideline?

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 1 litre 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

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.

None recorded

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.

None recorded

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]

None found to date

Site qualifies under this guideline? No

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]

None recorded

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

None recorded

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

Insufficient data

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

Birds recorded within the site that are likely to be breeding and or overwintering include raven, peregrine falcon, common crossbill, common bullfinch, Eurasian woodcock, and song thrush

Site qualifies under this guideline? No/borderline

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

None recorded

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 frog has been 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?

No

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)

None recorded

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

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]

None recorded

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]

None recorded

Site qualifies under this guideline?

No

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 information

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

Insufficient information

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

Insufficient information

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	No
H7	Marshy Grasslands	Yes/borderline
H9	Ffridd habitat	Yes
H10	Heath & Grass-Heath Habitats	Yes
H12	Bog Habitats & Flushes	Yes/borderline
H15	Watercourses	No
H18	Mineral Spoil Tips and Post-Industrial Land	Yes/borderline
H16	Standing Water	Yes/borderline
H20	Mosaic Habitats	Yes
H21	Rock Exposures	Yes
H22	Other Features	No
S1	Mammals	No
S2	Birds	Contributory
S3	Reptiles	No
S4	Amphibians	No
S6	Invertebrates	No
S7	Vascular Plants	No
S8	Fungi	No
S9	Mosses and Liverworts	No
S10	Lichen	No

5.0 REFERENCES

Biodiversity Reporting & Information Group (BRIG 2007) *Report on the Habitats & Species Review: A Report to the UK Biodiversity Partnership*. Joint Nature Conservation Committee, Peterborough.

Glamorgan Biodiversity Action Group (GlamBAG 1999) *Draft Habitat Action Plans for Glamorgan*.

Merthyr Tydfil Biodiversity Partnership (MTBP 2008) *Guidelines for the Selection of SINC's in Merthyr Tydfil*. Merthyr Tydfil County Borough Council.

Merthyr Tydfil Biodiversity Partnership (MTBP 2008) *Action Plan for Wildlife in Merthyr Tydfil: The Merthyr Tydfil Biodiversity Action Plan 2008-2013 (Adopted Version)*. Merthyr Tydfil County Borough Council.

Nature Conservancy Council (NCC 1989) *Guidelines for the Selection of Biological SSSIs*. NCC Peterborough.

Nature Conservancy Council (NCC 1990) *Handbook for Phase 1 Habitat Survey: a Technique for Environmental Audit*. NCC Peterborough.

Rodwell, J (Ed) (1991 - 2000) *British Plant Communities*. Vols 1-5. Cambridge University Press.

Royal Society for the Protection of Birds (RSPB 2009a): Birds of Conservation Concern: The Population Status of Birds in Wales, 2. RSPB, Sandy.

Royal Society for the Protection of Birds (RSPB 2009b): Birds of Conservation Concern 3: The Population Status of Birds in the United Kingdom, Channel Islands & Isle of Man. RSPB, Sandy.

Sothorn E (1986) *Glamorgan Inventory of Ancient Woodlands (Provisional)*. Nature Conservancy Council.

South Wales Wildlife Sites Partnership (SWWSP 2004) *Guidelines for the Selection of Wildlife Sites in South Wales*. Gwent Wildlife Trust.

TACP (1996) *Landscapes Working for Wales: A Landscape Strategy for the Borough of Merthyr Tydfil*. 4. *Technical Annex*. Welsh Development Agency, Mid Glamorgan County Council, Merthyr Tydfil Borough Council.

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.

Wales Biodiversity Partnership (WBP2007) *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

Latin Name	English Name	Indicator species							Status
		W	NG	CG	AG	MG	MST	TF	
<i>Achillea millefolium</i>	Yarrow								
<i>Agrostis capillaris</i>	Common bent								
<i>Agrostis stolonifera</i>	Creeping bent								
<i>Agrostis canina</i>	Velvet bent				x	x			
<i>Alchemilla spp</i>	A ladys mantle								
<i>Alnus glutinosa</i>	Alder								
<i>Anthoxanthum odoratum</i>	Sweet vernal grass								
<i>Arrhenatherum elatius</i>	False oat grass								
<i>Athyrium filix-femina</i>	Lady fern								
<i>Betula spp</i>	Birch species								
<i>Blechnum spinant</i>	Hard fern	x							
<i>Calluna vulgaris</i>	Ling heather	x			x				
<i>Cardamine flexuosa</i>	Wavy bittercress								
<i>Carex bufonius</i>	Toad rush								
<i>Carex remota</i>	Remote sedge								
<i>Carlina vulgaris</i>	Carlina thistle			x			x		
<i>Centaurea nigra</i>	Common knapweed		x	x					
<i>Centaureum erythraea</i>	Common centaury		x	x					
<i>Chamerion angustifolium</i>	Rose bay willowherb								
<i>Cirsium arvense</i>	Creeping thistle								
<i>Corylus avellana</i>	Hazel								
<i>Cynosurus cristatus</i>	Crested dogs tail								
<i>Dactylus glomerata</i>	Cocks foot								
<i>Danthonia decumbens</i>	Heath grass		x		x				
<i>Deschampsia cespitosa</i>	Tufted hair grass								
<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 species	x							
<i>Epilobium montanum</i>	Broad leafed willowherb								
<i>Epilobium hirsutum</i>	Great willow herb								
<i>Fagus sylvatica</i>	Common beech								
<i>Fallopia japonica</i>	Japanese knotweed								
<i>Festuca ovina</i>	Sheeps fescue			x	x				
<i>Festuca rubra</i>	Red fescue								

DAVID CLEMENTS ECOLOGY LTD

<i>Fraxinus excelsior</i>	Ash								
<i>Galium mollugo</i>	Hedge bedstraw			x					
<i>Galium palustre</i>	Marsh bedstraw					x			
<i>Galium saxatile</i>	Heath bedstraw				x				
<i>Geranium robertianum</i>	Herb robert								
<i>Glyceria notata</i>	Plicate sweet grass					x			
<i>Hedera helix</i>	Ivy								
<i>Holcus lanatus</i>	Yorkshire fog								
<i>Holcus mollis</i>	Creeping soft grass								
<i>Hyacinthoides non-scripta</i>	Bluebell	x							SEWBRcC
<i>Ilex ilex</i>	Holly								
<i>Juncus articulatus</i>	Jointed rush					x			
<i>Juncus effusus</i>	Soft rush								
<i>Kindbergia praelonga</i>	Common feather moss								
<i>Larix kaempferi</i>	Japanese larch								
<i>Linum catharticum</i>	Fairy flax		x	x			x		
<i>Lolium perenne</i>	Perennial rye grass								
<i>Luzula campestris</i>	Field wood rush		x						
<i>Luzula pilosella</i>	hairy wood rush								
<i>Luzula sylvatica</i>	great wood rush								
<i>Lysimachia Nummularia</i>	Creeping jenny					x			
<i>Molinia caerulea</i>	Purple moor grass					x			
<i>Oxalis acetosella</i>	Wood sorrel	x							
<i>Pilosella officinarum</i>	Mouse ear hawkweed		x	x	x				
<i>Pinus contorta</i>	Lodgepole pine								
<i>Plantago lanceolata</i>	Rib wort plantain								
<i>Plantago major</i>	Broad leaved plantain								
<i>Polypodium spp</i>	Polypody species	x							
<i>Polystichum spp</i>	Shield fern species	x							
<i>Potentilla sterilis</i>	Barren strawberry	x		x					
<i>Prunella vulgaris</i>	Self heal								
<i>Pteridium aquilinum</i>	Bracken								
<i>Quercus petraea</i>	Sessile oak	x							
<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								
<i>Rumex spp</i>	Dock species								
<i>Picea abies</i>	Norway spruce								
<i>Picea sitchensis</i>	Sitka spruce								
<i>Polytrichum commune</i>	Common haircap moss								

DAVID CLEMENTS ECOLOGY LTD

<i>Senecio jacobaea</i>	Ragwort								
<i>Taraxacum officinalis</i> agg	Dandelion								
<i>Teucrium scorodonia</i>	Wood sage								
<i>Trifolium repens</i>	White clover								
<i>Trifolium pratense</i>	Red clover		x						
<i>Tsuga heterophylla</i>	Western hemlock								
<i>Ulex spp</i>	Gorse								
<i>Umbilicus rupestris</i>	Wall pennywort								
<i>Urtica dioica</i>	Nettles								
<i>Vaccinium myrtillus</i>	Bilberry	x		x	x				
<i>Viola spp</i>	Violet species								
<i>Wahlenbergia hederacea</i>	Ivy leaved bellflower					x			SEWBRcC
	SWWSP 2004 'Indicator Species' Totals	12	7	9	8	8	2		
		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

DAVID CLEMENTS ECOLOGY LTD

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	SEWBrEC
<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	M TC B C	Locally common resident; breeds in small numbers but continues to suffer persecution	SEWBrEC
<i>Garrulus glandarius</i>	Jay	2b	V								Common resident breeder and occasional passage migrant	
<i>Loxia curvirostra</i>	Common crossbill		1					B		M TC B C	Scarce resident breeder and passage migrant with occasional population irruptions	SEWBrEC
<i>Prunella modularis</i>	Hedge accenter		G	P	W	A					Common resident breeder	SEWBrEC
<i>Pyrrhula pyrrhula</i>	Common bullfinch		G	P	W	A	R	B	B	M TC B C	Common resident breeder	SEWBrEC

DAVID CLEMENTS ECOLOGY LTD

<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	M TC B C	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

Reptiles		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>Rana temporaria</i>	Frog, common							

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

APPENDIX 2: REPRESENTATIVE SITE PHOTOGRAPHS (November 2012)



1. Bracken in south eastern tip of site



2. Broad leaf tree and scrub along southern edge



3. View of larch plantation along eastern boundary



4. View of open ride in centre of site



5. Bramble and scrub with scattered trees in open ride



6. View of marshy grassland/flush along path



7. View of mature beech and oak woodland to north east



8. Track leading into site from north east



9. Heathland adjacent to larch plantation



10 Track leading into west of site

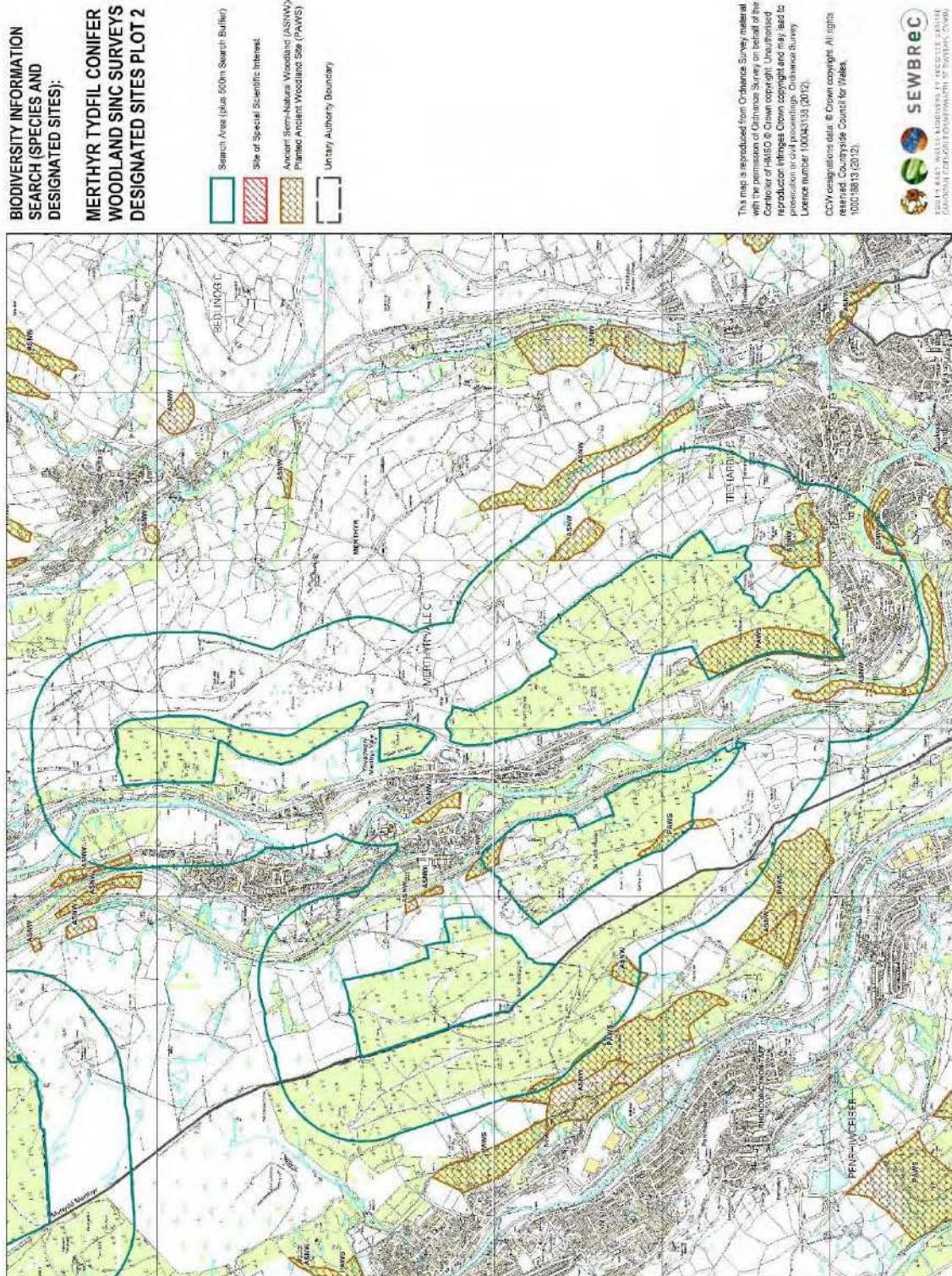


11. Woodland within quarry and across scree habitat

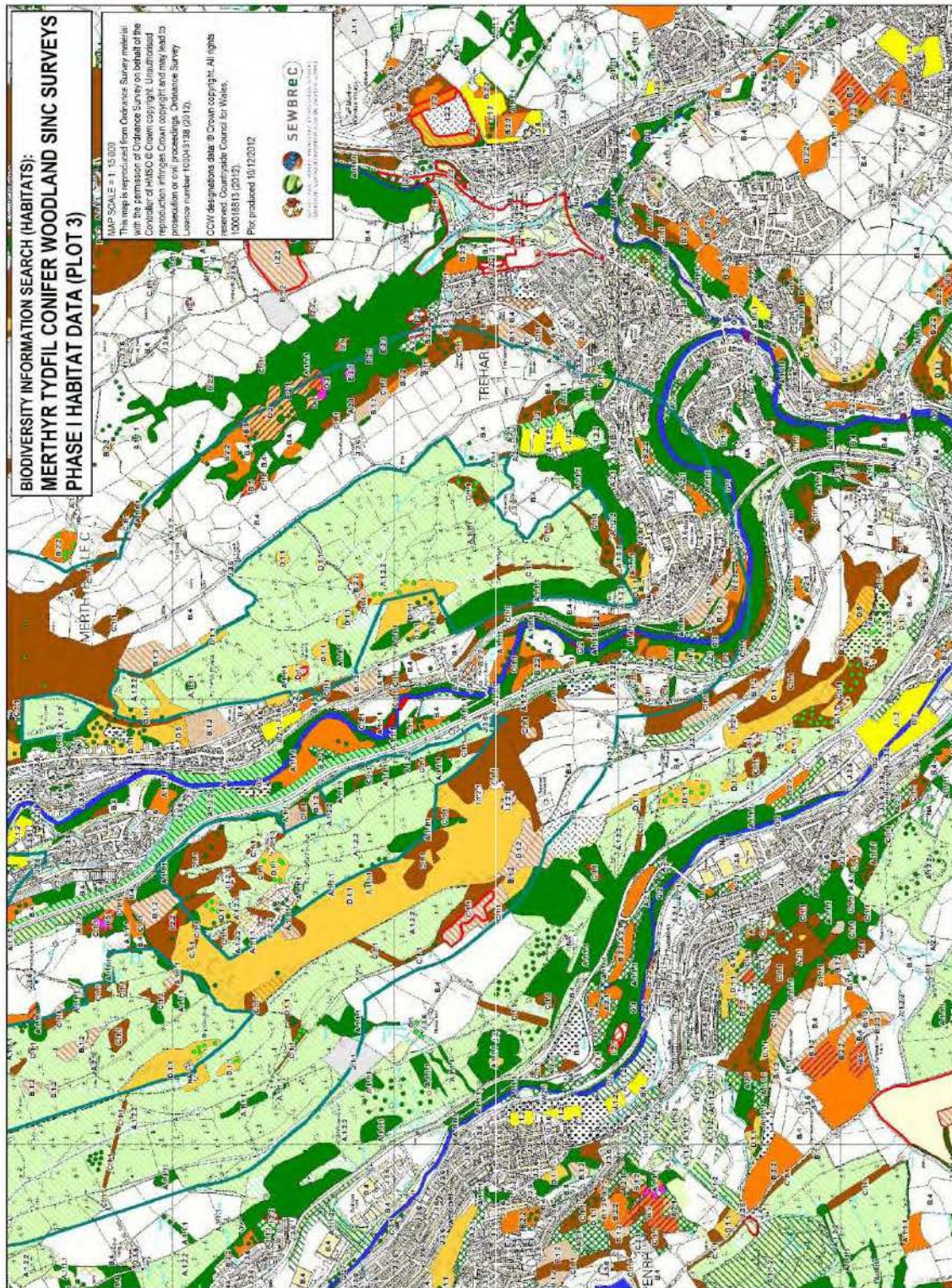


12. Quarry face to the north of the site

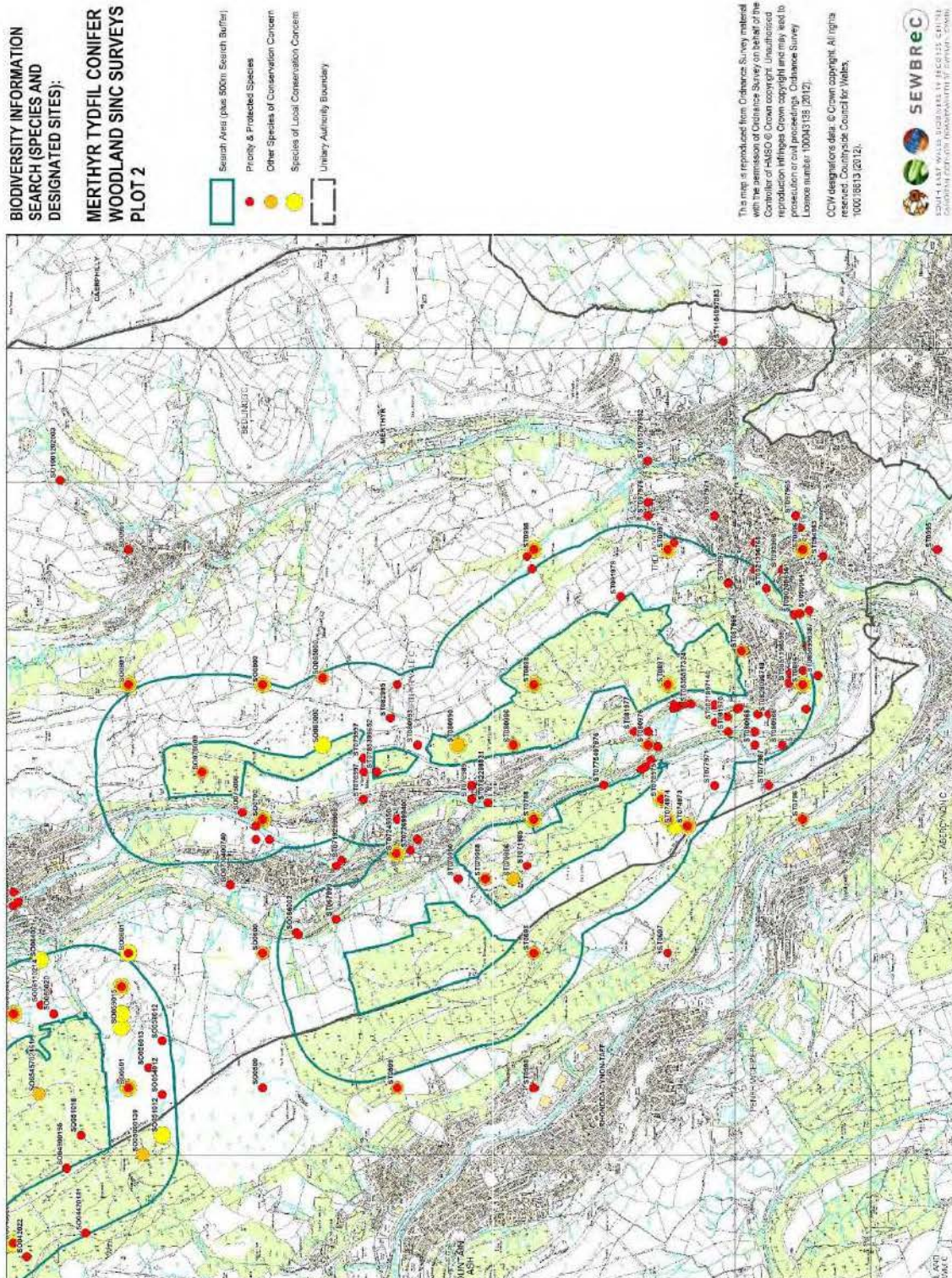
APPENDIX 3: STATUTORY SITES WITHIN 500m (SEWBRc data, 2012)



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



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



Merthyr Tydfil SINC Assessment Survey

St Tydfil Forest (West)

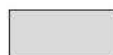
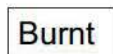







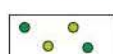





Plan 2: Habitats & Vegetation

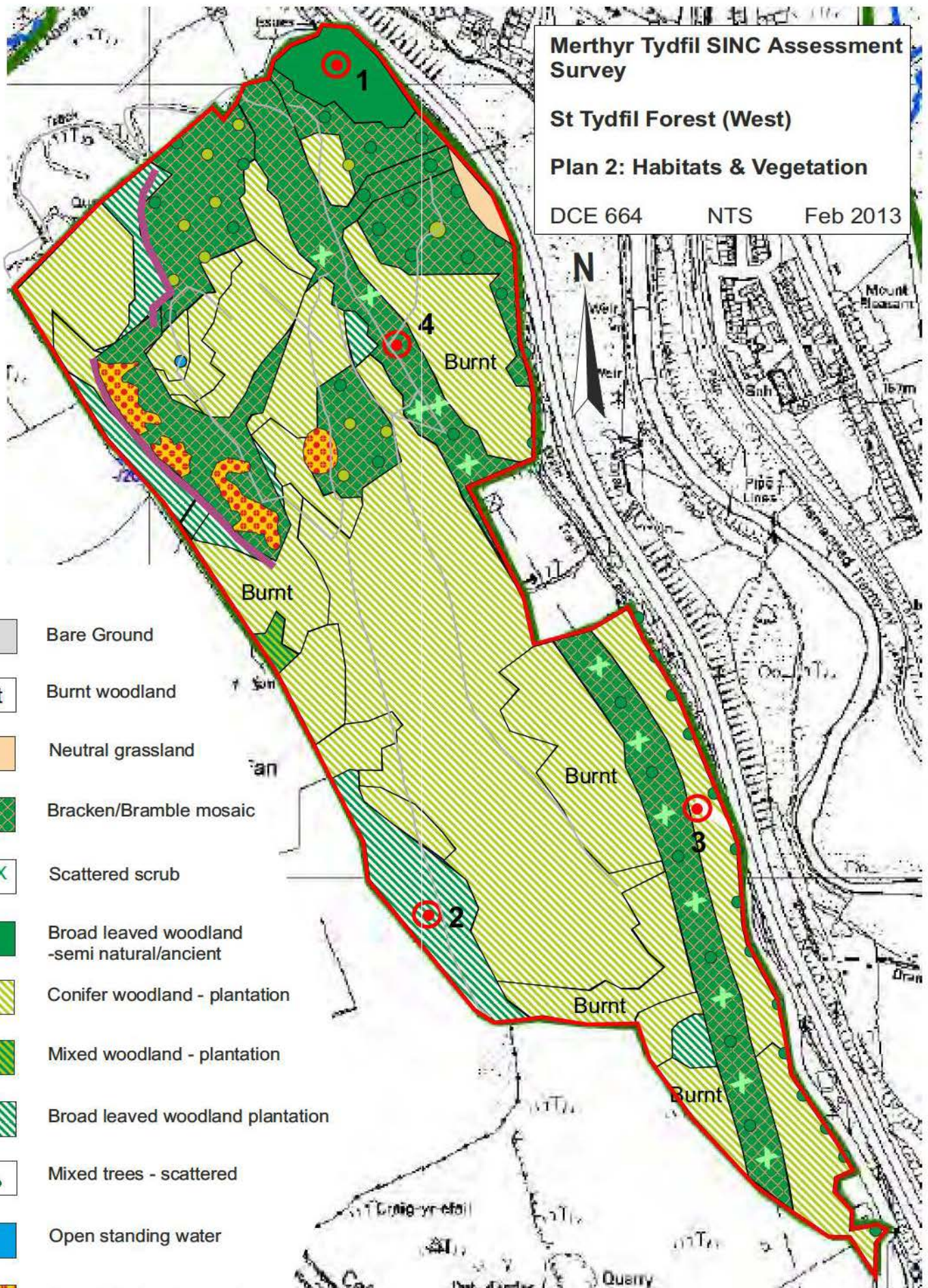
DCE 664

NTS

Feb 2013

KEY

-  Bare Ground
-  Burnt
-  Neutral grassland
-  Bracken/Bramble mosaic
-  Scattered scrub
-  Broad leaved woodland -semi natural/ancient
-  Conifer woodland - plantation
-  Mixed woodland - plantation
-  Broad leaved woodland plantation
-  Mixed trees - scattered
-  Open standing water
-  Scree/ dry heath mosaic
-  Quarry face
-  Target note
-  Site boundary



DCE 664 NTS Feb 2013

