

MERTHYR TYDFIL COUNTY BOROUGH SITES OF IMPORTANCE FOR NATURE CONSERVATION

ST TYDFIL FOREST (EAST)

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 FOREST (EAST)

Grid Ref(s): St 077 995 (W); SO 078 012 (N); ST 088 984 (E); ST 086 968 (S)	Site No.:		
Status: Site surveyed in November 2012, and	Candidate	-	Date: January 2012
assessed against relevant criteria January 2013	Proposed		Date:
	Confirmed		Date:

Summary - Reasons for Selection/Interest of Site:

Areas 1 (North) and 3 (South) of St Tydfil (East) have been identified as meeting SINC criteria (WBP 2008). Both contain large habitat mosaics, which include significant coverage of woodland. These areas comprise largely conifer plantations, which support a good assemblage of ancient woodland indicators. Many areas of conifer woodland also support remnant heathland and acid grassland, although this is largely restricted to woodland margins/tracks and open rides.

There are large single areas of planted semi natural woodland, in each area in addition to smaller pockets of semi natural woodland, all of which support ancient woodland indicator species as well as heathland and acid grassland throughout. Part of Area 3 contains ancient woodland, which has been replanted with broad leaved woodland. Larger open areas in both areas, support bracken/ffridd habitat, which is scattered with both broad leaf and conifer trees as well as small pockets of dry heathland in mosaic with acid grassland, where rocky outcrops occur and the ground is not dominated by bracken. Parts of Area 3 have been quarried, and there are several cliff faces/rocky ledges which support a variety of flora.

Some habitats such areas of replanted ancient woodland, semi natural broad leaf woodland and dense bracken/ffridd are already included within the Merthyr Vale and Treharris Park and Cardiff Road Woodlands.

Both marsh tit (Area 3) and barn owl (Area 1 & 3) have been recorded within the site, both being likely to breed within areas of broad leaved woodland and mature broad leaf trees, along conifer woodland edges. Barn owls are also likely to overwinter within both areas. Other important species known to breed and or overwinter within the site includes common linnet, raven, peregrine falcon, common crossbill, spotted flycatcher, marsh tit, house sparrow, cormorant, redstart, green woodpecker, common starling and song thrush.

The site (Area 3) also supports scarce blue tailed damselfly.

Meets SINC Selection Criteria No.s: H20, H1, H3, H4, H9, H10, H15, H18, H21 & S1

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

Primary Features i.e. Qualifying criteria:

Mosaic habitats (H20) Mosaic of semi upland habitats comprising conifer plantation, semi natural broad leaved, replanted ancient woodland, watercourses, rock exposures and supporting scrub, neutral grassland, acid grassland, heathland post industrial land and ffridd

Validation	survey(s):	Surveyor	Date
Forestry Con South East W	ces of data: mission Vales Biodiversity Records Centre (SEWBReC) fil County Borough Council		
the mosaic of indicators (al make the site	otes: Area 2, comprises a much smaller area of half habitats as are found in Areas 1 & 3. The conifer ong the woodland margin), which although alone is worthy of consideration for inclusion within adjac	woodland does support some and not thought sufficient to designate	ient woodland te as a SINC, may
Merthyr Con Mynydd y Ca Merthyr Vale Afon Taf Coed cefn	apel	sitet which is locally conifer and	dags not support
Treharris par	ory/non-statutory wildlife sites contained by/adj k & Cardiff Road	ACCHI IO SINC:	
Previously in Small areas a	lentified areas of interest contained within SINC lready included within SINC designations- Merthy See continuation sheet:	r Vale and Treharris Park & Card See Confidentia	
Protected Sp respect to trad	pecies: marsh harrier, peregrine falcon, common cro de	ssbill, redwing and barn owl, and	l bluebell with
	Heathland Rivers and streams Inland rock Coniferous plantation Ffridd	Dipper Song thrush Barn owl Small pearl bordered fritillary	
LBAP	Key Habitats: Broad leaved woodland Grassland	Key Species: Common linnet Peregrine falcon	
	Lowland mixed decidious woodland Upland oakwood Upland heathland Rivers and streams Inland rock outcrops and scree habitats Open mosaic habitats on previously developed land	Bars (foraging, possibly roostin Tree pipit Marsh tit Wood warbler Dunnock House sparrow Song thrush Barn owl Small pearl bordered fritillary	19)
UK BAP	Priority Habitats: Lowland mixed deciduous woodland	Priority Species: Bats (foraging, possibly roostin	ua)
Rock Expose Birds (S1) - 1 Secondary F Scrub Comm Neutral Gra Acid grassla Ffridd comm Heath and G Mineral Spo Birds (S2) -	ure (H21) marsh tit and barn owl ceatures i.e. Contributory criteria: nunities (H3) sslands (H4) nds (H6)		catcher, marsh tit,
	ant heathland/acid grassland mosaics, semi natural d planted ancient woodland es (H15)	woodland with a range of ancient	t woodland

DAVID CLEMENTS ECOLOGY LTD

	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 (East)' 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 a three separate areas of FC land which together make up St Tydfil East (See Plan 1). The whole site slopes from the Cardiff Road in the west towards to the Twynygarreg/'The Park', to the east and is bordered by the towns of Merthyr Vale/Aberfan in the west and Edwardsville to the south. The site can be described as a semi upland area which lies between about 200m AoD along the western margin, rising to approximately 300m AoD along the eastern margin.
- 1.3 Conifer plantations comprise a large proportion of the site, although pockets of semi natural broadleaf woodland, some of which support small areas of remnant heathland, occur throughout the site. In addition there are number areas of bracken, neutral grassland, heathland and short perennial vegetation in more open areas within the site such as along tracks and around remaining disused quarries. There is a stream to the south east of the site, which connects to Nant Ddu Fach in the south.
- 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. There are several rocky outcrops found within the site which are associated with quarrying activities.
- 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 SINCs 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). 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 (SINCs).

County Wildlife Sites

- 1.7.2 To the immediate north of the site lies Merthyr Common South SINC. This SINC is designated for its mosaic of habitats including extensive acid grasslands, dry heathlands, bracken slopes, acid flushes and marshy grasslands together with small pockets of silver birch woodland and scattered trees.
- 1.7.3 Along the north eastern boundary of the site is Mynydd y Capel Common SINC. This SINC largely comprises dry acid grassland with some heathland and areas of gorse in addition to outcrops of rock and disused quarries.
- 1.7.4 Merthyr Vale SINC lies along the north western boundary and partly within the site (in Areas 1 & 3). This 'Ffridd' habitat comprises largely oak and birch woodland, acid grassland, dry heathland and bracken in addition to smaller areas of marshy and neutral grassland and scattered scrub. A disused quarry and associated areas of spoil also occurs within the SINC. Within Area 1, to the south west, there is a small area of semi natural oak and birch woodland and dense bracken, which is part of the SINC. Within the north eastern part of Area 3, there is an area of semi natural oak and birch woodland and bracken.
- 1.7.5 To the south west, partly within the site (in Area 3) lies Treharris Park and Cardiff Road Woodlands SINC. The SINC comprises replanted ancient woodland in addition to open ffridd habitat with rocky outcrops, bracken and heathland. Within Area 3, habitats already designated as SINC include replanted ancient woodland and bracken slopes with mixed scattered trees and acid grassland, which lie to the east of Cardiff Road within the western side of Area 3. In addition a mosaic of dense bracken with small pockets of dry heath, larch plantation and beech woodland, which are included in the SINC, are found in the south western corner of Area 3.
- 1.7.6 Further to the south east is Coed Cefn Forest SINC. The SINC comprises large areas of semi natural broad leaved woodland, much of which is ancient woodland. Wet heathlands, marshy grasslands and bracken slopes, occur within the SINC as well as smaller areas of neutral grassland, acid grassland and acid flushes, and some small disused quarries and revegetated colliery spoil.
- 1.7.7 Further to the west is 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.
- 1.7.8 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

DCE 664:Merthyr Tydfil SINCs: St Tydfil Forest (East) SINC Assessment Survey: v. 1: Feb 2013

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 7 & 9 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 No nationally or regionally rare or scarce species have been recorded within and or adjacent to the site. However, bluebell (*Hyacinthoides non-scripta*), a species which is protected under schedule 8 of the Wildlife and Countryside Act 1981 with respect to trade, has been recorded within the site.

Notable Habitats

3.1.3 None of the habitats identified are considered to be of international importance. However, the site contains habitats such as lowland deciduous woodland, upland heathland, streams and inland rock 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 Broad leaved woodland exists within Area 1 and 3. These woodlands are largely found on sloping ground, to the west of both areas, with a canopy comprising abundant mature oak (Quercus petraea) and silver birch (Betula spp). Largely silver birch is present (Betula pendula), with scarcer downy birch (Betula pubescens) occurring in some areas. In the younger stands of oak-birch woodland, birch is more dominant in the canopy. Saplings of birch, oak and shrubs such as hazel (Corylus avellana) and holly (Ilex aquifolium) occur occasionally, scattered throughout the understory. The ground flora includes abundant wavy hair grass (Deschampsia flexuosa) and mosses, as well as other grasses such as Yorkshire fog (Holcus lanatus), creeping bent (Agrostis stolonifera) and common bent (Agrostis capillaris) along with herbs such as wood sorrel (Oxalis acestosella) and herb-robert (Geranium robertanium), tormentil (Potentilla erecta) and heath bedstraw (Galium saxatile). Bilberry (Vaccinium myrtillus) is frequent, often forming dense shrubs. Ferns such as soft shield-fern (Polystichum setiferum) and maleferns (Dryopteris spp) occur frequently throughout the woodland. Bramble (Rubus fruticosus agg) and ivy (Hedera helix) are also abundant across the woodland floor.
- 3.1.5 Semi natural broad leaved woodland along Cardiff Road to the west of Area 3 is identified as being an ancient woodland site that has been replanted with broadleaf trees (Sothern 1986; see Appendix 3) (Target Note 1, Plan 1b). The woodland here has a similar character to that described in paragraph 3.1.4 above, but with the addition of species such as mature beech (*Fagus sylvatica*) which occurs occasionally throughout the understory and canopy. Young conifer species including larch (*Larix* spp) and pines (*Pinus* spp) also occur sparingly within the understory, with western hemlock (*Tsuga heterophylla*) being frequent in some areas.

- 3.1.6 To the south of Area 3 there is beech woodland comprising mature beech (Target Note 2, Plan 1b). The canopy is high, with little understory except for holly and beech saplings. In some areas, mature oak is also present within the canopy. The ground flora is sparse, with the ground floor being largely covered by leaf litter. However, there is occasional bramble and ferns, and in some areas, bluebell (*Hyacinthoides non-scripta*).
- 3.1.7 A large proportion of these areas of semi natural broad leaved woodland form part of the existing Merthyr Vale and Treharris Park & Cardiff Road Woodlands SINCs. Areas of broad leaved woodland not included within these SINCs are found largely to the west of Area 1, in addition to young regenerating woodland and smaller pockets of semi natural woodland contained within conifer plantation occurring within Area 3.
- 3.1.8 Within conifer plantations in Area 3, small stands of broad leaved woodland occur which are dominated by oak. There is no understory and the ground flora is sparse, largely comprising mosses with occasional ferns and herbs such as wood sorrel.
- 3.1.9 Within Area 3, there is a large area of young/regenerating woodland (Target note 3, Plan 1b), which comprises of abundant species such as willow (*Salix* spp) and birch with frequent larch. The ground flora comprises dominant bramble with rosebay willowherb (*Chamerion angustifolium*), with bracken (*Pteridium aquilinum*) occurring frequently in some areas.
- 3.1.10 The broadleaved woodlands of the site collectively support at least 11 of the species which are listed as being indicative of ancient woodlands in the Mid Valleys SINC criteria (WBP 2008).

Conifer Woodland

- 3.1.11 A large proportion of the site comprises conifer plantation with single-species stands of larch, spruce and pine. Area 2 is largely conifer, with pure larch stands and mature broad leaf trees including oak, birch and willow restricted to the eastern boundary.
- 3.1.12 Similar stands of larch exist within Area 1 and also Area 3. The ground flora can be reasonably species rich, particularly in mature plantations, with the majority of these areas supporting abundant grasses including wavy hair grass, Yorkshire fog, sweet vernal grass (*Anthoxanthum odoratum*), creeping bent, common bent and ferns such as hard fern (*Blechnum spinant*), soft shield-fern and *Dryopteris* spp. Mosses, along with ivy, are abundant across the woodland floor. Herbs such as wood sorrel and herb-robert are also frequent and where the ground is damp, and sedges such as glaucous sedge (*Carex flacca*) and rushes including soft rush (*Juncus effusus*) and hard rush (*J. inflexus*) also occur.
- 3.1.13 In the denser stands of conifer plantation, particularly young spruce, there is little ground flora although ferns and mosses are present occasionally. The majority of the ground floor is covered by needle litter.
- 3.1.14 Bilberry occurs scarcely within conifer stands, and its occurrence is usually restricted to woodland margins along with wavy hair grass, heath bedstraw and mosses. Ling

heather (*Calluna vulgaris*) occurs sparingly usually only where there are clearings within the forest and or amongst rocky outcrops.

3.1.15 The conifer woodlands of the site collectively support at least 9 of the species listed as being indicative of ancient woodland in the Mid Valleys SINC criteria.

Acid Grassland

- 3.1.16 Small areas of acid grassland occur throughout the site, usually in a mosaic with heathland and/or bracken-dominated areas, in addition to occurring throughout on the woodland floor. These areas support wavy hair grass and common bent, with frequent sweet vernal grass, sheeps fescue (*Festuca ovina*) and Yorkshire fog. Brown bent (*Agrostis vinealis*) is also present in some parts. Herbs include tormentil, occurring with bilberry and heath bedstraw. Heath speedwell (*Veronica officinalis*) also occurs sparingly.
- 3.1.17 The dry acid grasslands of the site collectively support at least 8 of the species which are listed as being indicative of species-rich acid grasslands in the Mid Valleys SINC criteria (WBP 2008). An additional acid grassland indicator species has also been recorded from other habitats on the site.

Neutral Grassland

- Along many of the woodland margins there are wide verges of neutral grassland, 3.1.18 particularly along roads and well used tracks. Grasses include Yorkshire fog, sweet vernal-grass, cock's-foot (Dactylus glomerata), creeping bent and red fescue (Festuca rubra), along with herbs such as herb-robert, dandelion (Taraxacum offininalis agg), common vetch (Vicia sativa), self-heal (Prunella vulgaris), ribwort plantain (Plantago lanceolata), white clover (Trifolium repens), broad-leaved willowherb (Epilobium montanum), creeping buttercup (Ranunculus repens), germander speedwell (Veronica chamaedrys), violet species (Viola spp), common nettle (Urtica dioica) and barren strawberry (Potentilla sterilis). Tall ruderal species occur within these areas, particularly along woodland edges and also along tracks such as those leading into Area 3 from the east of the site, and around the building remains which are found there. Ruderal species include hogweed (Heracleum sphondylium), common ragwort (Senecio jacobaea), great willowherb (Epilobium hirsutum) and common knapweed (Centaurea nigra), often occurring with abundant bramble. Broom (Cytisus scoparius) also occurs frequently along tracks and edges of woodland within Area 3.
- 3.1.19 The neutral grasslands of the site collectively support at least 4 of the species which are listed as being indicative of species-rich neutral grasslands in the Mid Valleys SINC criteria (WBP 2008).

Bracken Communities

3.1.20 Within larger clearings of forestry, such as woodland rides and beneath electricity wires, bracken forms a dense carpet growing abundantly with bramble and rosebay willowherb. Young trees such as willow and birch are scattered throughout these areas, and in some parts conifer species such as pine, spruce and larch are also present. Bracken is also locally frequent along verges, which form woodland margins.

3.1.21 Some of the areas of dense bracken form part of the existing Treharris Park & Cardiff Road Woodlands SINC, where they occur with scattered trees and small pockets of dry heathland, and also part of the Merthyr Vale SINC, where they occur as a mosaic with semi natural broad leaved woodland.

Dry Heathland

- 3.1.22 Ling heather, which occurs scarcely along with bilberry, wavy hair grass and heath bedstraw in a mosaic with acid grassland, is found along the edges of woodland plantations and or in small clearings amongst the forestry which have not been dominated by bracken where it is often associated with rocky outcrops.
- 3.1.23 Within the south of Area 3 there are small pockets of dry heathland which occur within open areas of bracken where the rocky outcrops form part of the Treharris Park & Cardiff Road Woodlands SINC.

Streams & Ditches

3.1.24 A stream runs through the southern part of Area 3 and empties into the Nant Ddu Fach. Woodlands surround these stretches of stream, which comprise a rocky bed and, at the time of survey, fast flowing water travelling along its course. The stream banks support abundant ferns such as male fern (*Dryopteris filix mas*), hart's-tongue fern (*Phyllitis scolopendrium*) and scaly male fern (*Dryopteris affinis*).

Exposed Rock

3.1.25 There are several areas of exposed rock within the site particularly in Area 3 which appear to be from previous quarrying activity. Ferns, mosses and grasses grow on ledges with ling heather in some areas.

Short Perennial Vegetation

3.1.26 Along tracks around the site, particularly in the centre of Area 3 near the disused quarry, short perennial vegetation occurs. Species include mouse-eared hawkweed (*Pilosellla officinarum*), hawkbit species (*Leontodon* spp), ribwort plantain, bird's-foot trefoil (*Lotus corniculatus*) and coltsfoot (*Tussilago farfara*), amongst mosses and grasses such as creeping bent. Foxglove (*Digitalis purpurea*), hairy sedge (*Carex hirta*) and soft rush also occur along the tracks.

Bare ground

3.1.27 There are numerous tracks which run through Area 3 and which support no vegetation.

Japanese Knotweed

3.1.28 A large stand of Japanese knotweed (*Fallopia japonica*), an invasive non-native species which is subject to statutory regulation to prevent its spread, occurs within the centre of Area 3 around the remaining building and also in the centre of Area 1.

Historic Records

- 3.1.29 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 smaller areas of semi natural broad leaved woodland, neutral and acid grassland, continuous bracken, dry dwarf shrub heath, some of which had scattered trees and shrubs.
- 3.1.30 The site remains largely similar today, with the majority of habitats mapped between 1979 and 1997 remaining as previously recorded. Open areas including dry dwarf shrub heath and bracken, which were scattered with trees and scrub, now, appear to be dominated by mature trees and in some areas now form semi-natural 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 broad leaved woodland within the site which supports 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 broadleaved woodlands. However no records currently exist of dormouse within or immediately adjacent to the site (SEWBReC data, 2012).
- 3.2.2 No otter records exist from the site but they have been recorded within about 100m away on the River Taff (SEWBReC data, 2012), which lies to the west and south of the site. There are, however, a limited number of habitats within the site which would provide optimal habitat for otters, with only a small stream recorded in the south east of the site. The stream does, however, connect to the River Taff through the Nant Ddu Fach and it is possible that otter may utilise this stream which runs through part of the site. The majority of the River Taff is separated from the site by Cardiff Road, which is likely to act as a significant barrier to otter.
- 3.2.3 Various species of bats, including common pipistrelle and soprano pipistrelle, have been recorded adjacent to the site whilst foraging and or commuting. A number of bat roosts, including brown long-eared and pipistrelle species, have been recorded in houses within 500m of the site (SEWBReC data, 2012). Although no records of bats exist from the site itself, 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.
- 3.2.4 Dormouse, otter and bats, and the habitats that support them, are 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 Biodiversity Action Plan (UK BAP: BRIG 2007) and

its Welsh equivalent (WAG, 2007). They are also subject to Species Action Plans in the Local Biodiversity Action Plan (LBAP) for Merthyr Tydfil county borough.

3.2.5 Other mammals of conservation concern include European Hedgehog, a BAP 'Priority Species', which has been recorded adjacent to the site (SEWBReC data, 2012). Hedgehog is likely to utilise habitats occurring within the site.

Birds

- 3.2.6 Thirty-five species of bird have been recorded from the site to date. These include tree pipit, spotted flycatcher, house sparrow, marsh tit, dunnock, wood warbler, starling, song thrush and barn owl, all of which are listed as Priority Species in the UK BAP: and in its Welsh equivalent. A dead barn owl was found during the survey, lying on ground below a mature oak tree (Target Note 4, Plan 1).
- 3.2.7 Other birds of conservation concern in Wales and/or in the UK (RSPB 2009a/b) include long-tailed tit, mallard, meadow pipit, common swift, dipper, marsh harrier, barn swallow, grey wagtail, cormorant, redstart, coal tit, green woodpecker, goldcrest, redwing, willow warbler and mistle thrush, in addition to those listed above.
- 3.2.8 A number of species protected under schedule 1 of the Wildlife and Countryside Act 1981 have also been recorded, including barn owl, common crossbill, marsh harrier and peregrine falcon. With the exception of peregrine falcon, which was recorded breeding within the site, it is not clear from the records whether these species are breeding within the site. Both barn owl and common crossbill breed in similar habitat elsewhere in the region, and it is therefore possible that these species also breed within the site. Marsh harriers are likely to be passage migrants only.
- 3.2.9 Other species known to be either specially protected and or a priority for conservation are recorded from within 500m of the sit. These include goshawk, kingfisher, common cuckoo, merlin, kestrel, pied flycatcher, skylark, common bullfinch, fieldfare, hawfinch, reed bunting and red kite, in addition to other species of conservation concern including greater black backed gull, sand martin, stonechat and whinchat (SEWBReC data, 2012). It is likely that these species would also utilise some of the habitats present within the site, at least for foraging and/or shelter.

Reptiles

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

Amphibians

- 3.2.12 No amphibians have been recorded within the site. No suitable breeding habitats were recorded during the survey, but the damp grasslands and woodlands may be suitable for foraging, commuting or wintering amphibians. Stone walls around the site may also provide suitable hibernation sites.
- 3.2.13 No records of the rare and protected great crested newt are available for the site or within 500m. None of the habitats recorded during the survey have been assessed as having potential to support breeding great crested newt, and its occurrence within the site is considered extremely unlikely.

Fish

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

Invertebrates

- 3.2.15 Scarce blue tailed damselfly (*Ischnura pumilio*) has been recorded from the site. Scarce blue tailed damselfly is a scarce species in the UK, although it is recorded quite frequently in the Merthyr Tydfil region.
- 3.2.16 Other invertebrates of conservation concern found adjacent to the site include grayling and small pearl bordered fritillary butterflies (SEWBReC data, 2012), both 'Priority Species' in the UK BAP and its Welsh equivalent. Small pearl bordered fritillary is also a Merthyr Tydfil LBAP species.
- 3.2.17 A number of moths which are listed 'Priority Species' for research have also 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 (SEWBReC data, 2012). It is possible that these and other scarce and notable invertebrate species may occur within the site, particularly in the wet grassland, heathland and ancient woodland remnants.

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. SINCs) are available for South Wales (SWWSP 2004), and there is also guidance for the identification of SINCs in the Merthyr Tydfil county borough context which is based closely on the South Wales guidance (Mid Valleys Criteria, WBP 2008).
- 4.2 The following assessment of the biodiversity significance of the habitats and species of the St Tydfil Forest (East) 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 proposed Candidate SINC is shown at Plan 2. The recommended boundary is considered to represent the definitive minimum 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 SINCs in South Wales, the Mid Valleys and Merthyr Tydfil County Borough.

Habitats Represented on the Site	UK BAP Priority	Habitat	Wales BAP Priority	habitat	Glamorgan BAP Priority		Merthyr Tydfil LBAP Habitat Action Plan				
Semi natural Broad leaved woodland	Yes	a	Yes	a			Yes	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)		
Broad leaved woodland plantation		0.022		0.2							
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											
Bracken									Would contribute to 'Ffridd' habitat (HAP 10)		
Dry heathland	Yes	С	Yes	c			Yes	Heathland (HAP 3)	Upland heathland		
Streams and ditches	Yes	d	Yes	d			Yes	Rivers & streams (HAP 5)			
Rock exposure	Yes	e	Yes	e			Yes	Inland rock (HAP 8)			
Short perennial vegetation											
Bare ground								1.			

Table 1: Assessment Against BAP Priorities

a Lowland mixed deciduous woodland

b Upland oakwood

- c Upland heathland
- e Inland rock outcrop & scree habitats
- d Rivers & streams

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 East 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)

There is an area of ancient semi natural woodland to the south west of Area 3, which appears to have been replanted with broad leaved woodland and could be considered as Planted Ancient Woodland.

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 (including replanted ancient woodland) exists in parts of Area 1 and 3, support at least 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

Conifer woodland within Areas 1, 2 and 3 support at least 9 ancient woodland indicator species and planted broad leaved woodland supports at least 12 species. Both types of woodlands support remnant heathland and acid grassland, although in conifer woodlands these habitats (and ancient woodland indicator species) are largely restricted to woodland tracks, 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

Smaller compartments of semi natural broad leaved woodland, occur within larger areas of conifer plantation within Area 3 but form part of continuous woodland habitat within the wider site

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 9 ancient woodland indicators occurred within parts of conifer woodland habitat present in areas 1 and 3, with Area 2 supporting only 7. Heathland and acid grassland were also associated with conifer woodlands within the site, with 9 acid grassland indicator species being recorded across the site. These species occurred largely along woodland edges and or in woodland rides.

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 overmature 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 recorded

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

None present

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 SINCs.

Areas of scrub occur across the site (particularly in Area 3) 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 recorded

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 SINCs

Species poor neutral grassland occurs along woodland tracks, forming habitat corridors through the site and contribute 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]

Overall 9 acid grassland indicator species were recorded within the site, although occurred in open grassland as well as grassland throughout woodlands.

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 SINCs

Small areas of acid grassland occur within the site, which occur in mosaics with bracken and heathland habitats, as well as throughout some woodlands. These areas contribute to the overall habitat mosaic within the site.

Site qualifies under this guideline? Yes/borderline

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 SINCs

None present

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 SINCs

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

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. In these small areas heather makes up at least 10 % dwarf shrub cover.

> > 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

None present

Site qualifies under this guideline? No

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]

The site contains a stream which leads to the Nant Ddu Fach. The stream appears largely unmodified and is flanked by wet woodland. The water also 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 otters

Site qualifies under this guideline?

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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

None present

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

NA

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

NA

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

NA

Site qualifies under this guideline? No

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 archeophytye 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 number of areas have been quarried across the site, forming cliff faces and numerous rocky outcrops, which now support a variety of flora including ferns, grasses and heather.

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

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 10ne 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 planted ancient woodland along with watercourses, heathland, rock exposures and post industrial land. Smaller areas (which make up less than 25% of the site) including neutral grassland, acid grassland and bracken/ffridd, 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 seminatural 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

Several rock exposures exist in area 3, from previous quarrying which now support a variety of flora and fauna. One of the cliff faces is known to support breeding peregrine falcon.

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 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 11itre of soil/year]

None present

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 could potentially 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.

None 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.

None recorded within the site

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 could 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

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]

Barn owl have been recorded, which are likely to be breeding within the site Marsh tit have been recorded, which are likely to be breeding within the site

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, which are likely to be overwintering within the site

Marsh harrier have been recorded within the site during the Autumn, which are likely to be on passage to breeding grounds

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, spotted flycatcher, marsh tit, house sparrow, cormorant, redstart, green woodpecker, common starling and song thrush

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

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)

None recorded

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

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

Grayling and small pearl bordered fritillary have been recorded on adjacent land, and suitable habitat within the site

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

Scarce blue tailed damselfly has been recorded from site although the population size unknown

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

Insufficient information

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?

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

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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 form 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 form 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

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 form 3 or fewer sites within the Mid valleys area, which supports a significant population of National or LBAP Priority Species, or which is scarce o local in the area will contribute to a SINC designation.

Insufficient information

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	No
	Veteran Trees	
H3	Scrub Communities	No
H4	Neutral Grasslands	Yes/borderline
H6	Acid Grasslands	Yes/borderline
H7	Marshy Grasslands	No
H9	Ffridd habitat	Yes/borderline
H10	Heath & Grass-Heath Habitats	Yes/borderline
H12	Bog Habitats & Flushes	No
H15	Watercourses	Yes
H18	Mineral Spoil Tips and Post-Industrial	Yes
	Land	Ser PA Fullman
H16	Standing Water	No
H20	Mosaic Habitats	Yes
H21	Rock Exposures	Yes
H22	Other Features	No
S1	Mammals	No
S2	Birds	Yes
S 3	Reptiles	No
S4	Amphibians	No
S6	Invertebrates	No
S 7	Vascular Plants	No
S8	Fungi	No
S 9	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 SINCs 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.

Sothern 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 (WBP 2007) List of Species & Habitats of Principal Importance for Conservation of Biological Diversity in Wales, December 2007. Wales Biodiversity Partnership/Welsh Assembly Government.

APPENDIX 1: SPECIES RECORDED

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

Flora

				Indi	cator s	Status	Source			
Latin	English names	w	NG	CG	AG	MG	MST	TF		
Achillea millefolium	Yarrow									
Agrostis capillaris	Common bent			5.5					₽	
Agrostis stolonifera	Creeping bent		A		7,2	1,5 <u> </u>				5 a 5
Agrostis vinealis	Brown bent		13		x	1.1				5.47 5
Anthoxanthum odoratum	Sweet vernal grass					1. ¹²				0.07
Arrhenatherum elatius	False oat grass		fa.		.a	ι,τ		ć	7	. (?
Artemisia vulgaris	Mugwort			2.0					26 - S	0.02.
Betula spp	Birch species			2.0		62. 			24 - A	0.02.
Blechnum spinant	Hard fem	x		2.0					24	0.02.
Brachypodium sylvaticum	False wood brome									
Calluna vulgaris	Ling heather	x			x					
Cardamine flexuosa	Wavy bittercress									
Carex hirta	Hairy sedge									
Castanea sativa	Sweet chestnut			Ĩ						
Centaurea nigra	Common knapweed									
12.52	Rose bay			-		÷			\$	
Chamerion angustifolium	willowherb	1				in			04	
Cirsium arvense	Creeping thistle			-						
Corylus avellana	Hazel	<u> </u>		-						
Crataegus monogyna	Hawthom		<u> </u>							
Cytisus scoparius	Broom									
Dactylus glomerata Deschampsia flexuosa	Cocks foot Wavy hair-grass	x			x					
Digitalis purpurea	Foxglove									
Dryopteris spp	Male fem species	x								
Epilobium montanum	Broad leafed willowherb	~								
Epolibium hirsatum	Great willow herb									
Fagus sylvatica	Common beech			1						
Fallopia japonica	Japanese knotweed									
Festuca ovina	Sheeps fescue			x	x					
Festuca rubra	Red fescue					9.2. 7				
Fraxinus exclesior	Ash									
Galium mollugo	Hedge bedstraw			x						
Galium saxatile	Heath bedstraw				x					
Geranium robertanium	Herb robert			1						
Hedera helix	Ivy			-		1				
Heracleum sphondylium	Hogweed									

Holcus lanatus	Yorkshire fog								
Holcus mollis	Creeping soft grass								
Hyacinthoides non-scripta	Bluebell	x							SEWBReC data
Ilex ilex	Holly								
Juncus effusus	Soft rush								
Kindbergia praelonga	Common feather moss		0						
Larix kaempferi	Japanese larch								
Leontodon	Hawkbit species								
Lotus corniculatus	Birds foot trefoil common					19.02			
Lotus pedunculatus	Greater bird foots trefoil								
Oxalis acetosella	Wood sorrel	x							
Tsuga heterophylla	western hemlock								
Phyllitis scolopendrium	harts tongue fern								
Pilosella officinarum	Mouse ear hawkweed		v	x	x	1			
758			X		^				
Pinus contorta	Lodgeole pine Rib wort plantain								
Plantago lanceolata Plantago major	Broad leaved plantain								
Polypodium spp	Polypody species	x							
	Shield fern								
Polystichum spp	species	x				1			SEWBReC data
Potentilla sterilis	Barren strawberry	x		X		0.00			
Prunella vulgaris	Self heal							· ·	
Pteridium aquilinum	Bracken							 · ·	
Quercus petraea	Sessile oak Creeping	x	- 4	<u></u>	·				
Ranunculus repens	buttercup			**				 ···	
Rubus fruticosus	Bramble		-						
Rubus idaeus	Raspberry		-					 	
Rumex acetosella	Sheeps sorrel					50 F.			12
Rumex spp	Dock species					202	-		1 × 2
Picea sitchensis	Sitka spruce Common haircap				-	202	-		1.4
Polytrichum commune	moss							· · ·	
Potentilla erecta	Tormentil		x		x	204			
Senecio jacobaea	Ragwort					2.92		1	1.5
Stellaria media	Common chickweed								. C.
Taraxacum offininalis agg	Dandelion					_			
Taxus baccata	Yew	x							
Trifolium repens	White clover					202			
Trifolium pratense	Red clover		x						
Tsuga heterophylla	western hemlock								
Tussilago farfara	Colts foot		4					3	
Ulex spp	Gorse		4						
Urtica dioica	Nettles								
Vaccinium myrtillus	Bilberry	x	2	x	х				

Veronica chamaedrys	Germander speedwell								
Veronica officinalis	Heath speedwell		X		x				
Vicia sativa	Common vetch								
Viola spp	Violet species					-			
SWWSP 2004 'Indicator Spp'	Species' Totals	12	4	5	9	1	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

Latin Name	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
Accipiter nisus	Eurasian Sparrowhawk		ß								Common resident breeder	SEWBReC
Aegithalos caudatus	Long tailed tit		G				A	3 0			Common resident breeder	
Anas platyrhynchos	Mallard	2A, 3A	S			A	A				Common resident breeder whose population is augmented by local hand reared releases	SEWBReC
Anthus pratensis	Meadow pipit		G			A	A				Common resident breeder, winter visitor and passage migrant	SEWBReC
Anthus trivialis	Tree pipit		G	Р	w	R	A				Common breeding summer visitor and passage migrant	SEWBReC
Apus apus	Common swift		G			A	A				Common breeding summer visitor and passage migrant	SEWBReC
Ardea cinerea	Grey heron		G								Common resident breeder, the only known heronries at Hensol and Treorchy and on the Gower	SEWBReC
Cinclus cinclus	Dipper		G				A			M TCBC	Locally common resident breeder on suitable fast- flowing stretches of upland rivers and streams	SEWBReC
Circus aeruginosus	Marsh harrier		1			A	A		A		A scarce, but regular, passage migrant; an occasional non-breeding resident and winter visitor	SEWBReC
Corvus corax	Raven		G					В	В		Locally common resident breeder, especially in the uplands	
Delichon urbica	House martin											SEWBReC
Dendrocopos major	Great spotted woodpecker		G								Common resident breeder	
Falco peregrinus	Peregrine falcon		1						В	MTCBC	Locally common resident; breeds in small numbers but continues to suffer persecution	SEWBReC

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Garrulus glandarius	Jay	2b	v								Common resident breeder and occasional passage migrant	
Hirundo rustica	Barn swallow		G			A	A				Common breeding summer visitor and passage migrant	SEWBReC
Loxia curvirostra	Common crossbill		1					В		MTCBC	Scarce resident breeder and passage migrant with occasional population irruptions	SEWBReC
Motacilla cinerea	Grey wagtail		G			A					Common resident breeder and passage migrant	
Muscicapa striata	Spotted flycatcher		G	Р	w	R	R	в			Locally common breeding summer visitor and passage migrant, though appears to be declining markedly	SEWBReC
Parus ater	Coal tit		G				A				Common resident breeder	
Parus palustris	Marsh tit		G	P	w	R	R	A	в		Locally common resident breeder	SEWBReC
Passer domesticus	House sparrow		v	P	w	R	A	в	В		Common resident breeder	SEWBReC
Phalacrocorax carbo	Cormorant		G				A	A	В		Common non-breeding resident at all coastal sites and inland lakes, reservoirs and rivers. Records of the uncommon continental race P.c.sinensis apparently increasing	SEWBReC
Phoenicurus phoenicurus	Redstart	2	G			A	A	В			Common breeding summer visitor, chiefly to upland woodlands, and passage migrant	SEWBReC
Phylloscopus sibilatrix	Wood warbler		G	р	w	R	R				Common breeding summer visitor, though rarely seen at coastal sites on passage	SEWBReC
Picus viridis	Green woodpecker		G			A	A	в	В		Common resident breeder	SEWBReC
Prunella modularis	Hedge		G	Р	w	A					Common resident breeder	SEWBReC
Regulus regulus	Gold crest		G				A				Locally common breeding summer visitor and passage migrant, though numbers can be depleted in harsh winters	SEWBReC

Sturnus vulgaris	Common starling	v	P	w	R	R	в	в		Common but declining resident breeder and winter visitor	SEWBReC
Turdus iliacus	Redwing	1			R	A				Common winter visitor and passage migrant	SEWBReC
Turdus philomelos	Song thrush	G	Р	w	R	A	в	в	MTCBC	Common resident breeder	SEWBReC
Turdus viscivorus	Willow warbler	G			A	R				Locally common breeding summer visitor and passage migrant	SEWBReC
Turdus viscivorus	Mistle thrush	G			A					Common resident breeder	SEWBReC
Tyto alba	Barn owl	1	A	A	В	в	A	A	MTCBC	Uncommon resident breeder	SEWBReC, and during survey (DCE, 2012) Target note 1 (see Plan 1b)

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

Invertebrates

Group/Species	Common Name	LBAP	Status / Notes	Source	SINC status
Boloria selene Small pearl bordered fritillary		YES	Substantial local decline in SSSI guildelines (see text); UK BAP; WPS; Blaenau Gwent, MT, RCT, Swansea and Torfaen LBAP	SEWBReC	CS
Ischnura pumilio	Scarce blue tailed damselfly		Bridgend, BG, Caerphilly, Pembrokeshire and Torfaen LBAP	SEWBReC	CS

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: REPRASENTATIVE SITE PHOTOGRAPHS (November 2012)



1. Stone wall boundary of woodland, Area 2



3. Larch plantation within area 1, from the south



5. Woodland ride, below pylons through area 1



7. Road through area 1, from the north



2. View of larch plantation within Area 2



4. View of ground flora within larch in area 1



6. Bilberry and heather on edge of woodland, area 1



8. Woodland margin vegetation



9. Broad leaved woodland within area 1



11. Semi natural broad leaved wood at NWof area 3



13. Broadleaved woodland along Cardiff Road



17. Scrub/young woodland to south east of area 3



10 view of pine from north west of area 1



12. Bracken under electricity pylon, nw of area 3



14. Larch plantation on north west side of area



18. Larch plantation along east of area 3



19. Track leading into area 3, from east



21. Broad leaved woodland within area 3



25. Track to the south of area 3, adjacent to bramble



20. Disused quarry in centre of area 3



22. Ground flora of larch plantation



26. Broad leaved woodland to the south of area 3

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





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

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



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





