Ecological Report Parish Neighbourhood Plan For Meriden Parish Council

Habitat Biodiversity Audit Partnership for Warwickshire, Coventry and Solihull Warwickshire Wildlife Trust &

Ecological Services, Warwickshire County

Council



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Introduction

Wildlife and biodiversity are valuable as part of the natural environment, and in terms of contributing to people's quality of life and wellbeing. The Government has committed itself to halt and reverse the overall decline in biodiversity. Neighbourhood plans offer significant opportunities to understand the biodiversity assets you have and how they can be protected and enhanced.

Identifying biodiversity assets of your neighbourhood includes:

- Important habitats for example all woodlands, ponds, hedgerows and meadows;
- Designated nature areas, both statutory and non-statutory;
- Distribution of plants and animals
- Wildlife corridors between habitats to allow animals and plants to disperse

In addition to identifying biodiversity assets your local neighbourhood plan can be used to;

- Show where opportunities are for enhancing biodiversity by introducing different management of public spaces, planting trees or restoring hedgerows for example;
- Identifying where the threats to wildlife are, and how can they be avoided or mitigated;
- Plan to achieve a long-term biodiversity net gain for your parish
- The design and layout of major housing allocations

The Habitat Biodiversity Audit for Warwickshire Coventry and Solihull

Warwickshire, Coventry and Solihull are very well provided with wildlife information from Warwickshire Wildlife Trust's Habitat Biodiversity Audit and Warwickshire County Council Biological Records Centre.

The Habitat Biodiversity Audit (HBA) Partnership for Warwickshire, Coventry and Solihull has been surveying and maintaining a continuous record of the wildlife habitats for the Warwickshire sub-region since 1995. Today the HBA partnership is the longest running habitat survey programme of its kind in the country. Its success is due to the ongoing support and funding from all the local planning authorities across the sub-region, together with support and advice from the Environment Agency and Natural England.

In addition to the Phase 1 surveys the HBA incorporates the Local Wildlife Sites Project (LWSP) which designates Local Wildlife Sites (formerly Sites of Importance for Nature Conservation – SINCs) across the sub-region. Local Wildlife Sites are recognised within the planning system as of county importance for protecting wildlife and are incorporated into all local district, borough and county green infrastructure plans. Today there are more than 560 local wildlife sites in Warwickshire, Coventry and Solihull, covering more than 5,000 hectares.

The Warwickshire sub-region Phase 1 Habitat Survey

The Phase 1 Habitat Survey is a standardised system for classifying and mapping wildlife habitats in all parts of Great Britain.

The Warwickshire Phase 1 habitat survey programme has been running unbroken for 21 years and is updated annually with the aim to update the Warwickshire sub-region within a five year time span. The survey is managed by a GIS/Phase 1 officer with support from volunteers and ecological trainees.

Warwickshire was one of the first pilot areas for trailing the national biodiversity offsetting scheme which has now been formally adopted into the planning policy of all local authorities. Warwickshire was able to offer the offsetting scheme because of the consistent comprehensive coverage of the Phase 1 habitat dataset. The main addition from the offsetting scheme is the habitat distinctiveness score

In addition to the biodiversity offsetting scoring the Phase 1 habitat data has also been used for modelling habitat connectivity for woodlands and hedgerows, grasslands and wetlands and most recently for pond clusters.

For a detailed description of the Phase 1 habitat survey methodology please refer to the JNCC Handbook for Phase 1 habitat Survey (JNCC, 2010) and the HBA Phase 1 Survey Guidance Notes (Habitat Biodiversity Audit, 2012). The distinctiveness scoring methodology (Defra, 2012) is available on DEFRA's website at: http://www.defra.gov.uk/environment/biodiversity/uk/offsetting/. The biodiversity offsetting definitions and criteria for Warwickshire amended 10/05/2013 are available from Ecological Services Warwickshire County Council.

Warwickshire Biological Records Centre Species Records

Species information is based on existing records within the Warwickshire Biological Record Centre (WBRC). For this report EU and UK protected species, UK Biodiversity Action Plan, local Biodiversity Action Plan species and rare and endangered species have been noted where records are held digitally. These records have been used with local knowledge to provide spatial interpretation for each site.

This interpretation is based on data and information available at the time of preparing this report. Please note that lack of records may well indicate that no survey work has

yet been undertaken and does not indicate that species are necessarily absent. Protected species may be using the site and surrounding area and appropriate survey work may be required to establish their presence and to inform mitigation measures to ensure that they are not impacted by any proposed works.

Natural Environment Designations

Statutory Sites confer some form of statutory protection providing statutory protection for the best examples of the UK's flora, fauna, or geological or physiographical features.

Sites of Special Scientific Interest (SSSI)

A Site of Special Scientific Interest (SSSI) is a conservation designation denoting a protected area in the United Kingdom. SSSI's are legally protected under the Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way (CROW) Act 2000 and the Natural Environment and Rural Communities (NERC) Act 2006. This legislation gives Natural England powers to ensure better protection and management of SSSIs and safeguard their existence into the future.

Local Nature Reserves

A Local Nature Reserve (LNR) is a statutory designation made under section 21 of the National parks and Access to the Countryside Act 1949 and amended by Schedule 11 of the Natural Environment and Rural Communities Act 2006. All district and county councils have powers to acquire, declare and manage LNRs. Parish and town councils can also declare LNRs but they must have the powers to do so delegated to them by the principal local authority. To qualify for LNR status, a site must be of importance for wildlife, geology, education or public enjoyment. Some are also nationally important Sites of Special Scientific Interest.

LNRs must be controlled by the local authority through ownership, lease or agreement with the owner. The main aim must be to care for the natural features which make the site special.

Ancient Woodlands

Ancient woodland is defined as woodland that has been in continuous existence since at least 1600 AD. An inventory of ancient woodland was first initiated in 1981 by the Nature Conservancy Council (predecessor to Natural England), but only included woodlands greater than two hectares.

They include:

 Ancient semi-natural woodlands (ASNW) consisting mostly of native trees and shrubs, usually arising through natural regeneration

- Plantations on ancient woodland sites (PAWS) where the former tree cover has been felled and replaced by planted trees, usually with native species
- Ancient wood-pasture and historic parkland, many of which have not been included in the Ancient Woodland Inventory because their low tree density did not register on historical maps

Ancient Woodlands unless they are designated a SSSIs come under the National Planning Policy Framework (NPPF) (Communities and Local Government, 2018) guidance section 118 – state Planning policies and decisions should take opportunities to achieve environmental net gains – such as new habitat creation". In accordance with Planning for Ancient Woodland (Woodland Trust, 2017), local planning authorities should aim to conserve and enhance biodiversity" and to do this "development resulting in loss or deterioration of irreplaceable habitats, including ancient woodland and ancient or veteran trees should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists".

Due to historic significance, LPAs may also consider veteran trees, and woodland pasture and parkland as heritage assets.

Hedgerows

The Hedgerow Regulations 1997 (Defra, 1997) protect important countryside hedges from removal, without the permission of the local planning authority. If a hedgerow is at least 30 years old and qualifies under any one of the criteria, then it is an important hedgerow as set out in the regulations. The criteria relate to a hedgerows importance with respect to its archaeology and history; wildlife and landscape.

The Hedgerows Regulations states that the hedgerow does not have to contain trees, but any trees in it form part of the hedgerow. Where a former hedgerow has not been actively managed and has grown into a line of trees it is not covered by the regulations. However, lines of trees may be protected under existing licensing procedures for felling or by Tree Preservation Orders (TPOs).

The Warwickshire Biodiversity Action Plan (BAP) for hedgerows is defined as having more than 80% native woody species, including at least five woody species that are either native somewhere in the UK or which are archaeophytes. If this is the case then the hedgerow is defined as being species-rich.

Local Wildlife Sites

The few sites which have statutory designations because of their international or national interest represent the top of the hierarchy of protection. These sites are selected according to standardised criteria and procedures. Second tier, non-statutory sites, covering local nature conservation importance, are more difficult to classify as they have no legislative basis or standardised definition. The Warwickshire, Coventry

and Solihull Local Wildlife Sites Project created in 2000 set out to formerly identify Sites of Importance for Nature Conservation (SINCs), now known as Local Wildlife Sites (LWS). The formal process for identifying, surveying and designating Local Wildlife Sites is set out in The Green Book: Guidance for the Selection of Local Wildlife Sites in Warwickshire, Coventry and Solihull (Habitat Biodiversity Aufit, 2015 rev.)

Identifying Local Wildlife Sites

Local Wildlife Sites help buffer and connect natural areas, providing ecological networks and increasing resilience of biodiversity to pressure of land use and climate change. They contribute to the quality of life and the health and well-being of communities and provide important open space in urban areas.

The Making Space for Nature report (Lawton D.H., 2010) asserted that Local Wildlife Sites are highly vulnerable to damage and loss, and recommended improving their protection and management, underlining that Local Sites are "important to future ecological networks, because they not only provide wildlife refuges in their own right, but can act as stepping stones and corridors to link and protect nationally and internationally designated sites".

The Government response to Making Space for Nature, published alongside the Natural Environment White Paper, (Defra, 2011), encouraged Local Site Partnerships to continue to implement Defra's Local Sites guidance and play an increased role in identifying, protecting and managing Local Sites. The subsequent England Biodiversity Strategy 2020 (Defra, 2011) restated that Government will encourage local authorities to take a more active and positive role in the management of Local Sites, including through reporting data on such sites in the Government's new Single Data List.

The HBAs Local Wildlife Sites Project identifies potential local wildlife sites and re-visits designated local wildlife sites wherever possible to ensure their continuation as viable wildlife areas, and makes recommendations and advice on the selection and management of these sites.

National Planning Policy (NPPF)

The Government's National Planning Policy Framework (NPPF) (Communities and Local Government, 2018) state that the distinction should continue to be made between the hierarchy of international, national and locally designated sites, so that protection is commensurate with their status and gives appropriate weight to their importance. It advocates the protection of local sites recognising their importance and the contribution that they make to wider ecological networks.

The NPPF says that to minimise impacts on biodiversity and geodiversity, planning policy should:

- Plans should distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.
- Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them, and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation;
- Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species populations and identify and pursue opportunities for securing measurable net gains for biodiversity.
- Where Nature Improvement Areas (NIAs) are identified in Local Plans, consider specifying the types of development that may be appropriate in these Areas."

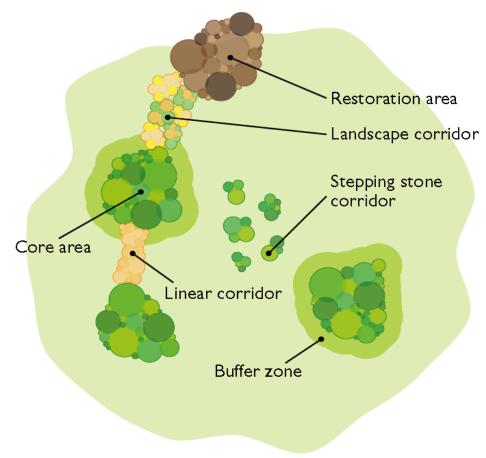


Figure 1: Wildlife Zones - bigger, better and connected Lawton 2010

Meriden Parish

The rural parish of Meriden covers approximately 11.5 square kilometres within the Metropolitan Borough of Solihull. The parish is located within the 'Meriden Gap' an important area of greenbelt between the City of Coventry to the east and the metropolitan area of Solihull to the west.

The parish sits in a valley near the historical seat and park of the Earl of Aylesford, having originally been called the town of Alspath.

The parish is bordered to the south by Berkswell and Benton Green with the small settlements of Cornets End and Four Oaks immediately adjacent to the southern parish boundary. Outside the eastern boundary lie the settlements of Pickford Green, Pinkett's Booth and Harvest Hill. Corley Moor lies north-east with Birchley Hays wood sandwiched between Chapel Green and the small hamlet of Kinwalsey marking the boundary at the northern tip of the parish. To the north-west Close Wood marks the parish boundary whilst further south the parish is dissected by the A45. The Packington estate dominates the landscape north of this divide with sand and gravel extraction occurring between the two B roads - the B4104 and the B4102. North Warwickshire Golf Club sits south of Hampton Lane whilst the Stonebridge Golf Club, Fishing lake sand The Somers caravan park lie/sit immediately outside the north-western exterior. The A452 marks the eastern boundary with the River Blythe crossing the parish for a short stretch at Moland's Bridge.

Historically the parish is within the Arden Landscape area (Rendell, 1990) a region of former wood pasture and heaths characterised by a dispersed settlement pattern, ancient woodlands and mature hedgerow oaks.

The Constraints Map

The constraints map for the parish is derived from the Phase 1 habitat mapping and shows where development should be avoided and ecological enhancement encouraged.

The important habitats are identified and buffered to create an overall green (terrestrial habitats) and blue (riparian and aquatic habitats) map which clearly demarcates the limits of development, they include:

- 30 metre buffer around all semi-natural woodland and broad-leaved plantation woodland
- 8 metre buffer either side of adjacent river courses
- 8 metre buffers around all wetland features including; emergent vegetation, lakes and ponds

- 5 metre buffer either side of intact hedgerows
- All areas of medium to high distinctiveness grassland with values 4, 5 and 6

These are the recommended minimum standard buffers as determined by Warwickshire County Council Ecological Services. Other LPAs have agreed 50 metre and 100 metre buffers for ancient woodlands For veteran trees the precautionary approach is set out in BS5837:2012 that there should be a minimum of 15 times the diameter of the tree trunk or 5 metres beyond the canopy, whichever is greater.

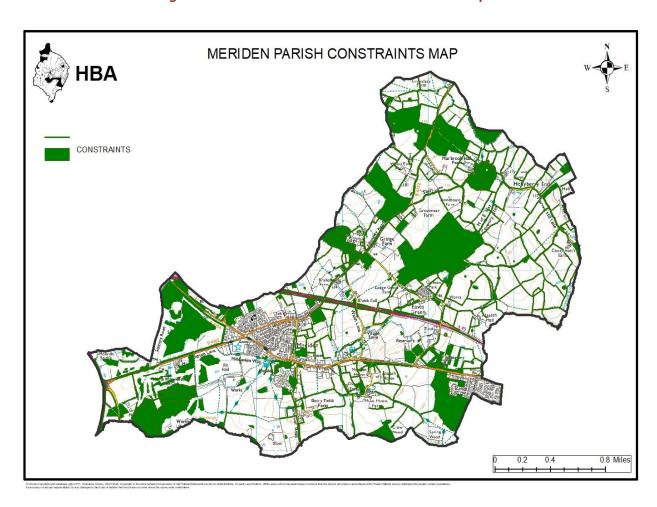


Figure 2: Meriden Parish Habitat Constraints Map

Designated and Statutory and Non-Statutory sites

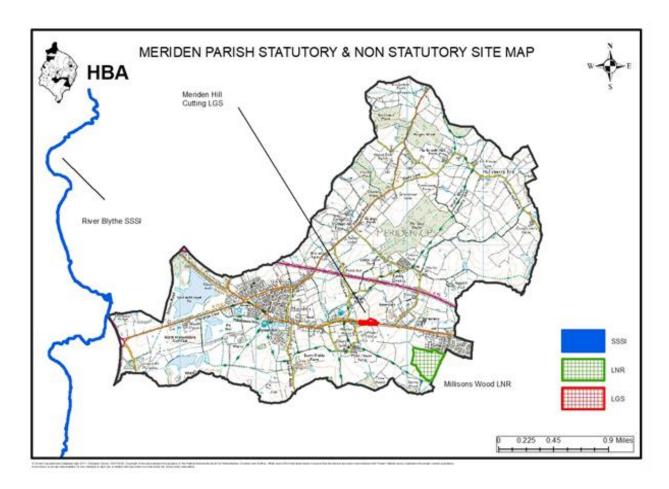


Figure 3: Meriden Parish Statutory & Non Statutory Site Designations Map

River Blythe SSSI

The 39 kilometre stretch of the River Blythe, from the point at which Spring Brook exits from under the Stratford-upon-Avon to Birmingham railway line to its confluence with the River Tame, is a particularly fine example of a lowland river on clay.

The diverse physical features of the Blythe are mirrored by its diverse plant communities. The mean number of plant species found in any 1 km stretch is above average for a lowland river, as is the number of species recorded for the whole length of the river. Botanically, the Blythe is one of the richest rivers in lowland England with the most species-rich sections containing as many species as the very richest chalk streams.

Meriden Cutting Local Geological Site

Local Geological Sites (LoGS), designated by locally developed criteria, are

Currently the most important places for geology and geomorphology outside Statutorily protected land such as Sites of Special Scientific Interest (SSSI).

The designation of LoGS is one way of recognising and protecting important Earth science and landscape features for future generations to enjoy. WGCG is responsible for the identification of LoGS in Warwickshire and the West Midlands.

Exposures up to 7m high on the north and south sides of the road, showing coarse sandstone belonging to the Allesley Member of the Upper Carboniferous Salop Formation.

Millisons Wood LNR

The wood has been designated and managed as an LNR by Solihull Metropolitan Borough Council since March 1993

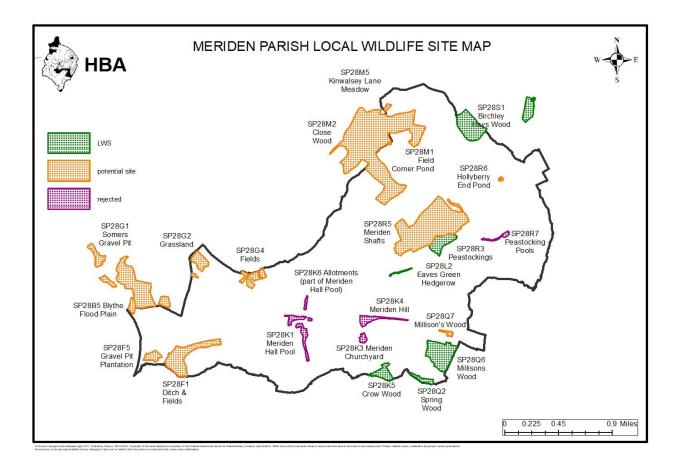


Figure 4: Meriden Parish Local Wildlife Site Map

Local Wildlife Sites by Status

Status	Site-ID	Site name	Area ha
LWS	SP28K5	Crow Wood	3.46
LWS	SP28L2	Eaves Green Hedgerow	0.44
LWS	SP28Q6	Millisons Wood	11.40
LWS	SP28R3	Peastockings	5.35
LWS	SP28Q2	Spring Wood	1.57
potential site	SP28F1	Ditch & Fields	12.43
potential site	SP28M1	Field Corner Pond	0.11
potential site	SP28G4	Fields	3.84
potential site	SP28G2	Grassland	3.82
potential site	SP28F5	Gravel Pit Plantation	2.30
potential site	SP28R5	Meriden Shafts	39.11
potential site	SP28Q7	Millison's Wood	0.73
potential site	SP28R6	Pond	0.33
rejected	SP28R7	Hedge and Copse	0.99
rejected	SP28K3	Meriden Churchyard	0.97
rejected	SP28K1	Meriden Hall Pool	4.03
rejected	SP28K6	Allotments	0.47
rejected	SP28K4	Meriden Hill	2.76

Table 1: Meriden Parish Local Wildlife Sites by Status

Crow Wood SP28K5

Crow Wood is a small 3.34ha area of native woodland situated on Moat House Farm 1.5km south east of the village of Meriden. It is part of a small complex of three native woodlands including Spring Wood LWS (SINC) and Millisons Wood LNR both of which are within 1km to the east. The boundary of Crow Wood has changed little since the first edition OS Map, although this shows the woodland has extended around the ponds in the north east which were previously in the neighbouring field.

Eaves Green Hedgerow SP28L2

The LWS (SINC) is part of Eaves Green Lane, a narrow country lane that is part of the Heart of England Way, and is located approximately 1.5 kilometres to the east of the village of Meriden. The LWS (SINC) extends from the A45 road bridge to the junction with Lodge Green Lane. From the road bridge, the lane rises gently, enclosed within steep roadside banks with gappy hedgerows, and many mature overhanging trees. Further east, as the road gradient levels, the hedges are very variable in structure and species composition, with the hedge on the north side of the carriageway, mostly tall, and unmanaged, whilst to the south the hedge includes long sections that have been

laid in the recent past. Both hedges contain many standard trees. The grass verges are generally narrow, and species poor

Millisons Wood LNR SP28Q6

Millisons Wood is situated 2km east of Meriden on the southern edge of the village of Millisons Wood. It is part of a small complex of three ancient woodlands which also includes Crow Wood SINC 3/4 km to the west and Spring Wood SINC 1/4 km to the south west. The surrounding land use is Arable to the east; improved grassland to the west and housing to the north. Since the first edition OS Map the wood has decreased by about a third. A contiguous area to the north of the present wood which was previously wooded is now occupied by the village of Millisons Wood.

The vegetation of Milisons Wood is W10 Quercus robur-Pteridium aquilinum-Rubus fruticosus woodland. The wood has been designated and managed as an LNR by Solihull Metropolitan Borough Council since March 1993.

It was noted by the Phase 1 survey in 2015 that the woodland holds invasive Spanish bluebell (*Hyacinthoides hispanica*) and variegated yellow archangel (*Lamiastrum galeobdolon galeobdolon ssp arentatum*).

Peastockings SP28R3 (re-survey)

Peastockings LWS comprises two small meadows of ancient semi-improved speciesrich neutral grassland, situated on the south side of the large replanted ancient woodland of Meriden Shafts, 1.5km east-north-east of Meriden at Eaves Green.

The site is enclosed between Meriden Shafts to the north and west, and a meandering wooded medieval (or earlier) green lane to the east, which acts as a wildlife corridor. A short section of bypassed hollow-way from this lane is present within the perimeter woodland on the eastern side of the south-west meadow. Strips of perimeter woodland and scrub are also present on the other boundaries, which appear to have developed through scrub invasion from former hedge boundaries.

Spring Wood SP28Q2

Spring Wood LWS (SINC) is a small 1.57ha area of native woodland situated in the Millisons Wood area of Solihull. It is part of a small complex of three ancient woodlands in the area including Crow Wood SINC and Millisons Wood LNR both of which are within half a kilometre of Spring Wood

Spring Wood is shown on the first edition OS Map with the same boundaries as the present wood.

The vegetation is a modified example of W10 Quercus robur-Pteridium aquilinum-Rubus fruticosus woodland.

Forest of Arden and Arden Landscape Recommendations

The Arden is an historic region of former wood pasture and heath characterised by a dispersed settlement pattern, ancient woodlands and mature hedgerow oaks. General development guidelines include:

- Protect and conserve the irregular pattern and characteristic features of roads and lanes
- Highway landscaping should be strongly linked to the surrounding landscape patterns
- Restoration proposals for mineral workings should be based upon an assessment of landscape character
- New agricultural buildings should be sited, designed and landscaped to blend with the surrounding farmed landscape.
- Landscape assessment should be a major consideration at the inception of all road schemes
- Conserve rural character by limiting standardised treatment during highway improvement schemes
- Conserve all sites of archaeological and historical importance
- Conserve the character of rural settlements by retaining existing features and local patterns in all development schemes
- Soften hard built edges through increased tree planting within and around new development

Management guidelines exist for important landscape habitats present with the Meriden parish and these include those for woodlands, heathland, quarrying, hedgerows and field ponds.

- Conserve and enhance the well wooded character of the parish.
- Conserve and restore primary hedgelines
- Enhance the wooded character of rivers and streams within the parish of Meriden
- Enhance tree cover through large scale woodland planting on rising ground adjacent to existing woodlands.

- Encourage farmers of adjacent woodlands to leave wide field margins
- Protect and enhance the open space and irregular outline of the Meriden settlement
- Conserve and enhance tree cover within urban areas
- Identify opportunities for re-establishing heathland on suitable sites
- Promote the regeneration and management of heathland flora on all remnant heathy areas.
- Retain and manage old naturally re-vegetated spoils heaps
- Encourage the natural regeneration of hedgerow oaks
- Enhance tree cover through small scale tree planting especially within defunct hedgerows.
- Retain and manage field ponds in areas of permanent pasture
- New woodland planting should be broad-leaved and any existing coniferous planting should be phased out in time. Restocking of plantation ancient woodlands should favour broad-leaved species
- Avoid the removal of hedgerows along footpaths, parish boundaries and woodland edges
- Long rotation coppicing should take place on existing woodlands.

Identifying important habitats – Phase 1 survey

The Phase 1 habitat survey for Meriden Parish has been updated by the survey tetrads (4 square km) that cover the parish area including SPS8Q in 2015, SP28S in 2014, SP28F & SP28G in 2013, SP28K & SP28R in 2012, SP28M in 2008, SP28L in 2005 and SP28K in 1998.

The Phase 1 habitat map for Meriden Parish is shown in Figure 4 and Table 1 below. Agricultural land use including arable and improved grassland together account for 68 percent of the total area surveyed (900 hectares) The priority habitats include the improved and semi-improved grassland and woodland and account for 12 percent of total survey area (158 hectares), these habitats will be either designated local wildlife sites or potential local wildlife surveys. The priority habitats are highlighted in Table 1.

The remaining habitats including (species) poor semi-improved grassland, amenity grassland, broad leaved plantation woodland and allotments are habitats that can be enhanced for wildlife with sympathetic management. Tall ruderal and dense continous scrub are typical habitats that have been neglected. Mixed and coniferous woodlands are replaceable with broad-leaved native trees.

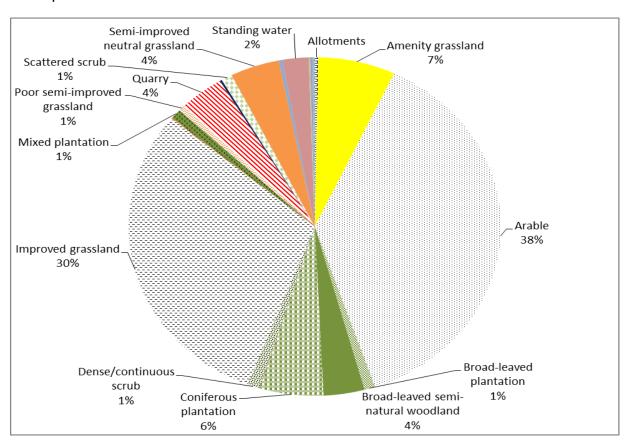


Figure 5: Phase 1 Habitats Represented as % of Total Survey Area

Table 2: Phase 1 Habitats by Area

Phase 1 habitats	AREA	% Area
	ha	70 7 11 0 01
Allotments	3.91	0.29%
Amenity grassland	89.22	
Arable	500.86	37.73%
Broad-leaved parkland/scattered	0.44	0.000/
trees	0.41	0.03%
Broad-leaved plantation	12.11	0.91%
Broad-leaved semi-natural woodland	<mark>47.37</mark>	3.57%
Coniferous plantation	73.67	5.55%
Continuous bracken	0.43	0.03%
Dense/continuous scrub	13.91	1.05%
Improved grassland	399.65	30.11%
Introduced shrub	0.78	0.06%
Marsh/marshy grassland	<mark>0.81</mark>	<mark>0.06%</mark>
Mixed plantation	12.35	0.93%
Poor semi-improved grassland	7.60	0.57%
Quarry	51.34	3.87%
Running water	<mark>2.36</mark>	<mark>0.18%</mark>
Scattered scrub	12.66	0.95%
Semi-improved neutral grassland	56.72	4.27%
Set-aside	4.09	0.31%
Standing water	30.3 <mark>1</mark>	2.28%
Swamp	<mark>1.54</mark>	0.12%
Tall ruderal	2.71	0.20%
Unimproved neutral grassland	2.40	0.18%
Wet woodland	0.25	0.02%
Grand Total	1,327.44	100.00%

Priority habitats

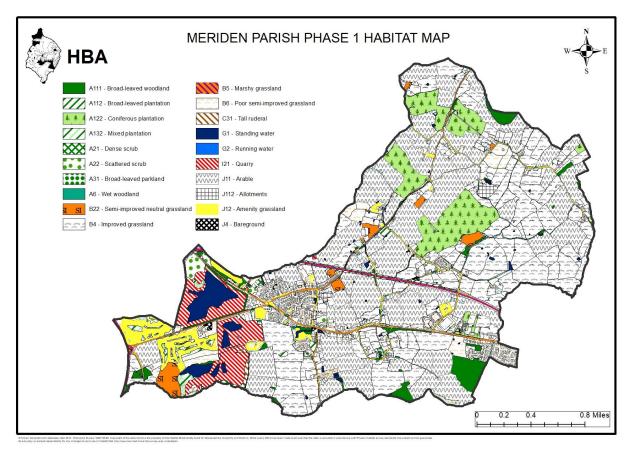


Figure 6: Meriden Parish Phase 1 Habitats Map



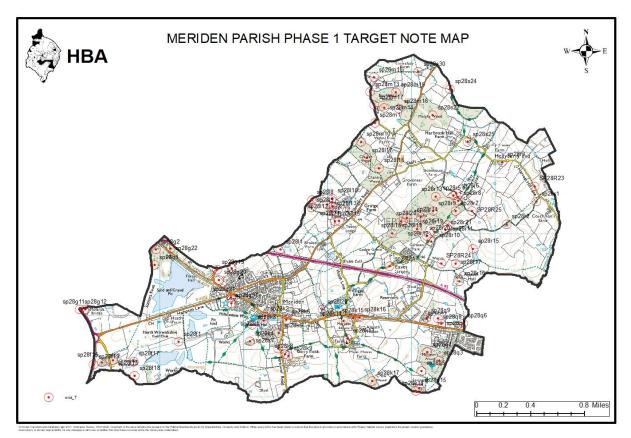


Figure 7: Meriden Parish Phase 1 Target Note Map

Priority Habitats:

Ancient Woodland & Semi-Natural Woodlands

Scattered blocks of ancient semi-natural woodland occur throughout the Arden and Meriden landscape. Meridian occupies three areas of semi-natural woodland, which are designated local wildlife sites and collectively make up the Millisons Wood complex with the addition of Crow and Spring Wood. There is a smaller section of woodland close by designated as Millisons wood potential wildlife site and would be a possible extension to the present Millisons Wood LWS. The woodland is enclosed by Grace and Albert Road and it is important for the ecological connectivity of these woodlands that rows of trees and hedgerows act as important corridors between them.

Plantation Woodlands

Planted broad-leaved, mixed and coniferous woodlands occur to the north and centre of the parish named Meriden Shafts, Close Wood and Birchley Hays Wood. As part of ecological enhancement these woodland components should be restored to native broad-leaved woodland by the staged removal of coniferous trees.

Hedgerows

Ancient mixed hedgerows often more than two metres wide are a special feature of Arden, and some may represent remnants of the original wildwood as it was cleared and converted into small hedged fields by assarting. A wide variety of woody species are typically present, often dominated by hazel, with dogwood, field maple, blackthorn and holly.

Hedgerows also provide important wildlife corridors and provide the connection for plants and animals to move between woodlands and grasslands.

There are two designated hedgerow local wildlife sites and approximately 5km of species rich hedgerows recorded by the Phase 1 habitat survey. Further hedgerow surveying would likely identify more species rich hedgerows across the parish.

Semi-Natural Grasslands

Areas of semi-improved permanent grassland are still a feature of the more pastoral Arden landscape. Many sites existed up to the Second World War are now largely destroyed or damaged as a result of agricultural intensification and development, but many areas do remain, particularly on marginal land including roadside embankments and verges; steep hillsides; disused railway cuttings; or as isolated groups of hedged fields.

Field Ponds

Field ponds, often fringed by scrub and trees, are found throughout Arden and are associated with a history of stock-rearing. Where they are managed to avoid silting up and over shading by surrounding scrub vegetation they can be valuable wildlife habitats. Although many ponds have been lost as a result of agricultural intensification and neglect they are still an important feature of the parish.

Many pools across the area remain under surveyed both as habitats and for the presence of great crested newts.

Phase 1 Habitat Distinctiveness

The habitat distinctiveness categories and their associated scores have been taken from the Biodiversity Offsetting Pilot in the UK National Ecosystem Assessment (UK NEA, 2011). The Phase 1 habitat classification does not determine between those land uses that are best for biodiversity and those that are not. The distinctiveness is designed to assign scores to those land-uses that are the most bio-diverse and those that are not.

The habitat distinctiveness categories can also be interpreted as areas of habitat importance or sensitivity to development, and are a useful way of simplifying the 57 Phase 1 map categories. Each Phase 1 habitat type has been given a distinctiveness score as below:

- 6 High distinctiveness
- 5 Medium / High distinctiveness
- 4 Medium distinctiveness
- 3 Low / Medium distinctiveness
- 2 Low distinctiveness.
- 1 None

High distinctiveness scores equate to areas of highest biodiversity, including all unimproved habitats. High distinctiveness will incorporate statutory sites, Local Wildlife Sites and the Biodiversity Action Plan (BAP) habitats and species. The high distinctiveness category for linear habitats includes species-rich hedgerows.

Moderate distinctiveness scores are a mid-way assessment for areas that are either a transition from high to low or vice versa; or are of indeterminate biodiversity. Examples include semi-improved neutral grassland, scrub and tall ruderal1 which are transitional and temporary habitats. Linear sites with moderate scores include intact hedgerows. Low distinctiveness scores are areas of low biodiversity interest. These areas cover the majority of the sub-region, including for example agricultural farmland, amenity grassland and coniferous plantation woodland. Low linear scores are associated with defunct hedgerows, fences and dry ditches.

Ancient Woodland and SSSIs and considered as irreplaceable habitats and although are given a score of 6 for the purpose of mapping they are to be avoided. By definition,

 1 Ruderal from the latin for rubble or rubbish refers to cleared areas that have become colonised by pioneer plant species, typical tall perennial or biennial plant species e.g. Rosebay Willowherb , Common nettle, Japanese Knotweed

they are not replaceable. Local Wildlife Sites are also scored highly for their habitats but afford less protection under planning law.

Figure 5 shows the distinctiveness maps highlighting the important woodlands; seminatural grasslands; and intact and species rich hedgerows.

Phase 1 Habitat Connectivity

The NPPF recognises the need for, and the implementation of landscape habitat connectivity. However, the NPPF does not specify how this should be done. The HBA together with WCC Ecological Services and York University developed a set of Phase 1 habitat connectivity maps in 2012 which continued until recently. The Solihull Metropolitan Borough Council *Additional Site Options Ecological Assessment* 2016 included the connectivity assessment maps as part of the report findings. The quality and level of detail afforded by the Phase I cover data allow the results to be used as measures of structural connectivity, where the physical connectedness of the landscape elements of habitat patches and linear features can be assessed.

In 2017 HBA began working with open source connectivity modelling software called Conefor 2.6 (Saura, 2006). Some of the mapped results are shown below in Figure 6.

The main habitat groups identified for the connectivity mapping include:

- Woodlands; including semi-natural, broad-leaved plantation and scrub land
- Priority grasslands; namely all grasslands that have not been agriculturally improved
- Standing water and habitats associated with marshy conditions; ponds and marsh
- Intact hedgerows and trees

The connectivity mapping shows where there are opportunities for improving connections between similar types of habitats. Conversely the mapping can be used to assess the possible impact of development on existing habitats and where these can be offset or avoided altogether.

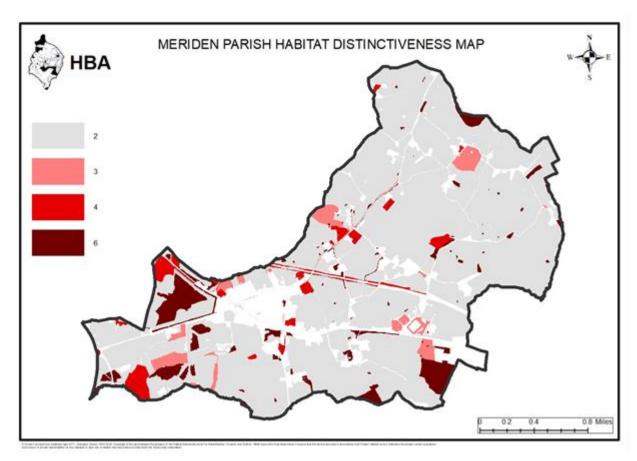


Figure 7: Meriden Parish Habitat Distinctiveness Map

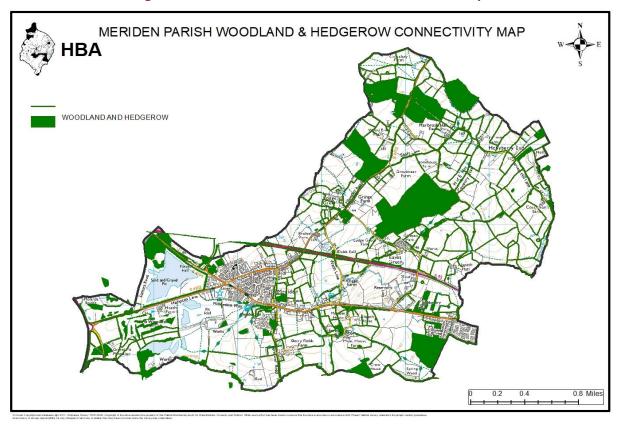


Figure 8: Meriden Parish Woodland and Hedgerow Connectivity Map

Protected species

Protected species information is based on existing records within the Warwickshire Biological Record Centre (WBRC). For this report EU and UK protected species, UK Biodiversity Action Plan, Local Biodiversity Action Plan species and rare and endangered species have been noted where records are held digitally. These records have been used with local knowledge to provide spatial interpretation for each site.

This interpretation is based on data and information available at the time of preparing this report. Please note that lack of records may well indicate that no survey work has yet been undertaken, and does not indicate that species are necessarily absent. Protected species may be using the site and surrounding area and appropriate survey work may be required to establish their presence and to inform mitigation measures to ensure that they are not impacted by any proposed works.

Protected Species in Warwickshire (*Warwickshire Wildlife Trust, 2012*)

European Protected Species (EPS) are protected under the Conservation (Natural Habitats &c.) Regulations 1994 found in Warwickshire include:

- All species of bat
- Great crested newt
- Otter
- Dormouse
- White-clawed crayfish
- Other species that are protected under the Wildlife and Countryside Act 1981 (as mended) and the Protection of Badgers Act 1982 relevant to Warwickshire include:
- Water Vole
- Barn owl
- Grass snake
- Slow worm
- Common lizard
- Badger

Warwickshire, Coventry and Solihull Local Biodiversity Action Plan (LBAP)

The Warwickshire, Coventry and Solihull Local Biodiversity Action Plan (LBAP) provide a local response to the UK Government's National Action Plans for threatened habitats and species. The LBAP contributes to national targets wherever these are relevant to the Warwickshire sub-region but also sets local targets. The LBAP action plans for all local habitats can be found on the Warwickshire Wildlife Trust site:

http://www.warwickshirewildlifetrust.org.uk/LBAP

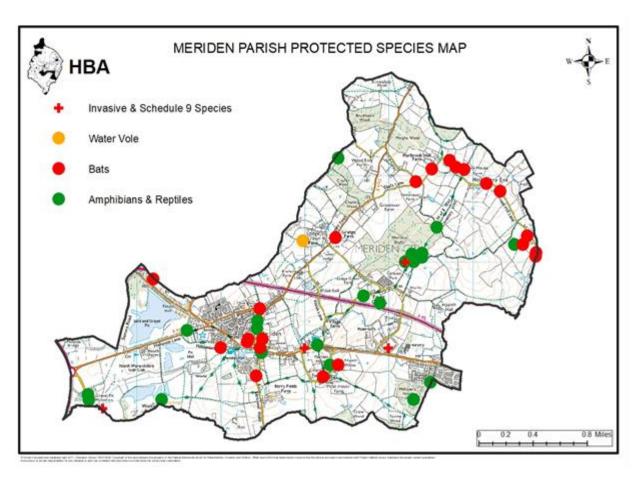


Figure 9: Meriden Parish Protected Species Map

Priority Species

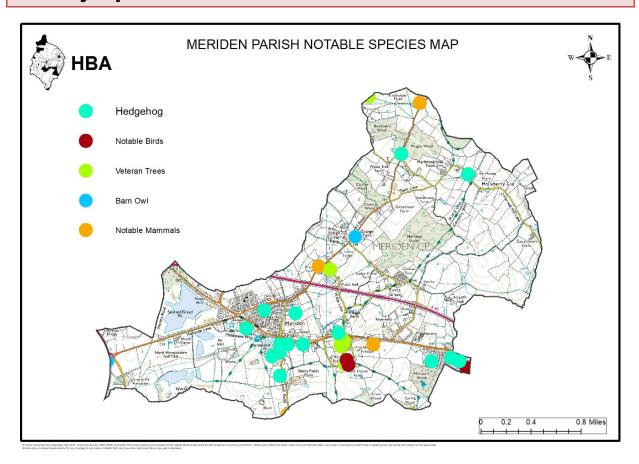


Figure 10: Meriden Parish Notable Species Map

White Hairstreak

The butterfly breeds on various elm species, including Wych Elm (Ulmus glabra), English Elm (U. procera) and Small-leaved Elm (U. minor). Research at one site has indicated a preference for (and a higher success rate on) Wych Elm. It breeds on mature trees, or abundant sucker growth near dead trees. The butterfly breeds where elms occur in sheltered hedgerows, mixed scrub and on the edges of woodland rides. The butterfly can also be found on large isolated elms.

Retention of Elm Trees

Woodland and hedgerow management that retains elm trees will benefit the White-letter Hairstreak. Fell trees infected with Dutch Elm Disease. Weak and dying elm trees provide the under bark habitat for broods of elm bark beetle. Check for brood trees in spring, and fell and debark to limit the spread of the disease. Field Maple (Acer

campestre) and Ash (Fraxinus excelsior) are also thought to be important for Whiteletter Hairstreak so retention of these around elm within a hedgerow/ woodland would be beneficial. Lime trees in close proximity to elm should also be retained as these are used for nectaring.

Suckering, Regrowth and Coppicing

Encourage suckering of elm from roots or regrowth from cut stumps. Elm regrowth usually becomes infected with Dutch Elm Disease at about 12 years, when it reaches 5-10m tall, so coppicing elm on a 10 year cycle will limit re-infection. Hedgerow Management Avoid clipping elm hedgerows until after July, ensuring larvae have a plentiful supply of flowers and young leaves to feed upon. Wide field margins should be retained for nectar sources such as thistles and brambles.

<u>Planting</u>

Include elm of local provenance in new woodlands and hedgerows. Disease-resistant trees are now propagated for this purpose.

Survey/Monitoring

Finding and identifying elm is a suitable beginning when surveying for the butterfly. Not all elm in a landscape is dead and often small elms are overlooked. Adults can be seen from mid-June - early August high in the tree canopy. Adults are seen high in the tree canopy and also in sunny sheltered spots around elm trees. On some sites searching for eggs and larvae can be used to establish breeding presence. Eggs can be found on branches throughout the winter and are characterised by their 'flying saucer' shape. They are often situated on the underside of the girdle scar, (where the most recent growth meets the older wood); at the base of side shoots; on old leaf scars or at the base of buds. Larvae in the early stages of development can be found in eaten out seeds within seed clusters. Oval patches of feeding damage on leaves, especially at the base can indicate the presence of mature larvae (Butterfly Conservation, 2019).

Hedgehog

Good numbers of records exist within the Meriden parish especially in the urban centres which lie within a Hedgehog Improvement Area run by Warwickshire Wildlife Trust.

Recommendations for household owners include;

- Linking gardens throughout the Meriden parish to enable hedgehogs to forage, commute and socialise.
- Keeping wild areas hedgehogs need dry, sheltered places to nest
- Do not disturb avoid disturbing hibernating hogs from November to March
- Check before mowing mowers and strimmers can cause serious harm to nesting hedgehogs

- Make a log pile rotting wood attracts lots of insects for hedgehogs to eat
- Don't use pesticides pesticides reduce the food available for hedgehogs to eat
- Make ponds safe hedgehogs can get stuck in ponds, build a ramp or ladder to help them get out
- Tie up garden netting hedgehogs can get tangled in slack garden netting
- Don't drop litter hedgehogs can get caught up in our rubbish and be seriously injured
- Send in your hedgehog records to the Warwickshire Biological Records Centre (Warwickshire Wildlife Trust, 2019).

Veteran Trees

Veteran trees are an integral and valuable part of the lowland British landscape. There is a tendency to view old trees as immutable and immortal. They have demonstrated their resilience to past threats but some of the potential threats of today have no precedents or are on a scale, or are taking place at a rate that may outstrip the ability of the trees to adapt. Vigilance is needed to identify future threats. Those most frequently encountered today are: felling - to obtain the wood and timber, for safety reasons, to increase tidiness, for change in land use (e.g. development or agriculture) or for landscape reasons; competition from surrounding trees both planted and naturally occurring (or sudden release from competing trees), neglect (lapsed pollards having heavy branches that the tree is unable to support), inappropriate past management (e.g. filling cavities with concrete, girdling with chains and iron bands), unskilled tree surgery (e.g. cutting into the bolling, uncontrolled major limb removal, damaging retained limbs), • inappropriate management of surrounding land (e.g. ploughing close to the trees, use of agricultural sprays and fertilisers or damage to roots by development, trenching and cable installation), inappropriate grazing levels (too little results in tree cover that can shade out the old trees, too much does not allow any tree regeneration and can lead to bark stripping, soil compaction, enrichment etc.), rapid changes in water table levels or surface water causing drought (e.g. owing to increased abstraction or naturally induced) or water-logging owing to raised levels, fire externally, e.g. through fires in the surrounding land, bonfires, or internally owing to vandalism, pollution - remote, from industry and traffic, or localised, e.g. toxic rubbish such as oil and chemicals close to the tree, salt on roadside trees or nitrogen enrichment owing to manure and compost heaps, trampling/soil compaction - caused by livestock, people or vehicles, bark damage - caused by people, vehicles or livestock, disease - e.g. Dutch elm, oak dieback and lightning strike.

Often some of these threats are accelerated when land changes ownership.

A veteran tree survey of Meriden parish is recommended by a suitable 'sensitive' professional with the ethos of retention, conservation and creation. Existing veteran trees should be identified and management plans put in place for their continued retention and to ensure appropriate management. Young trees should also be planted in Meriden parish to start a new generation of aging and veteran trees and already

established trees should be identified for preservation as possible veteran trees in the future. Veteran trees should for the guide produced by English Nature (Veteran Trees, A guide to good management by Helen Read)

Sand Martins

Sand martins are present within Tarmac Meriden Sand and Gravel Quarry and usually nest in natural sheer cliff faces on river bends or in man-made sites such as gravel or sand pits. They use vertical earth and sand banks soft enough for burrowing, in open areas.

Efforts should be maintained to preserve nesting sand martins at this site and within the parish of Meriden. If the site has to be reformed back to the habitat it was prior to extraction, provisions should still be made to ensure that sand martins have sites for which to nest. Safe and long-lasting banks can be created for sand martins. When creating a bank the face must be vertical and rise at least 1.5m above normal water level. It should be as long as possible, ideally over 5m. Wooden stakes, boulders or gabions may be used to protect the toe of the cliff but, if erosion is prevented, the bank may become unsuitable.

If banks are less than 1.5m above water, or the substrate is stony or liable to slumping, then stoneless spoil can be brought in and packed behind shuttering (available from builders merchants), finished with turf or reseeded, trees or shrubs planted, and the area stock-fenced if necessary. It should be left at least a year to settle, and the shuttering removed in early May before the birds start prospecting for a nest site. Banks have been made for sand martins using a weak or dry concrete mix around clay or polythene pipes. If this option is chosen, the bank must be vertical with water at its foot.

Pipes should be of at least 6cm internal diameter set in rows 30cm apart with the pipes at 20cm spacing, and the bottom row at least 1m above summer water level. The pipes should be no more than 1m long, sloping very slightly up into the bank (to prevent rainwater flooding the nest chamber) with the opening flush to the cliff face. It is best to fill the pipes with sand for the birds to excavate, with the entrance hole half blocked with cement. The birds should be able to tunnel farther into loose sandy material at the other end of the pipe. It is essential that the pipes are dry inside, not acting as drains. Ideally, pipes should be scraped out and refilled each winter (RSPB 2019).

Priority Species - Section 41 of the NERC Act 2006

The Natural Environment and Rural Communities (NERC) Act came into force on 1st Oct 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of

habitats and species which are of principal importance for the conservation of biodiversity in England The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions. Fifty-six habitats of principal importance are included on the S41 list. There are 943 species of principal importance included on the S41 list. These are the species found in England which were identified as requiring action under the UK BAP and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework. Detailed in Table, details all the 35 species that are Section 41 Species of Principal Importance that occur within Meriden Parish and the year in which they were recorded;

Table 1: Species of Principal Importance under Section 41 of the NERC Act 2006 recorded in Meriden Parish.

Grey dagger moth (Acronicta psi)	2015
Ear moth (Amphipoea oculea)	2016, 2017
Mouse moth (Amphipyra tragopoginis)	1975, 2017
Water Vole (Arvicola amphibious)	2005
Toad (Bufo bufo)	1982, 1996, 2003,
Toda (Baro Baro)	2011,2013,2014,2015
Latticed heath moth (Chiasmia clathrate)	2014
Small heath (Coenonympha pamphilus)	1995, 1996, 1997, 2011
Small square-spot moth (Diarsia rubi)	2017
Small phoenix moth (Ecliptopera silaceata)	2005, 2016,2017
September thorn moth (Ennomos erosaria)	2017
Dusky thorn moth (Ennomos fuscantaria)	2017
European hedgehog (Erinaceus	2005, 2012,2013,2014,2015,2016,
europaeus)	2017,2018
The rustic moth (Hoplodrina blanda)	2016
Rosy rustic moth (Hydraecia micacea)	2017
Wall (Lasiommata megera)	1995, 1996, 1997
European Hare (Lepus europaeus)	2004, 2007
Rosy minor (Litoligia literosa)	2017
Dot moth (Melanchra persicariae)	2016
Penny royal (Mentha pulegium)	2011
European polecat (Mustela putorius)	2015, 2016
Grass snake (Natrix natrix)	1999, 2013, 2014,2015
Tubuler water-dropwort (Oenanthe	1965
fistulosa)	
Soprano pipistrelle (Pipistrellus pygmaeus)	2010, 2011, 2012,2013,2014,2015,
	2016, 2017
Brown long-eared bat (Plecotus auritus)	2010, 2011, 2018
White Hairstreak (Satyrium w-album)	1994, 1995,1996,2010, 2013,2014,
Annual knawel (Scleranthus annuus)	2015, 2016, 2017, 2018 1996, 2011
Annual Knawei (Scierantinus annuus)	1990, 2011

Shaded broad-bar (Scotopteryx	2016, 2017
chenopodiata)	
White ermine moth (Spilosoma	2017
lubricipeda)	
Buff ermine moth (Spilosoma luteum)	2015
Blood-vein moth (Timandra comae)	2017
Great crested newt (Triturus cristatus)	1982, 2012
Cinnabar moth (Tyria jacobaeae)	1981
Adder (Vipera berus)	1976,1977
Oak hook-tip (Watsonalla binaria)	2016
Dark-barred twin-spot carpet moth	2016
(Xanthorhoe ferrugata)	

Proposed Housing Allocations

In 2016 Solihull Metropolitan Council commissioned the HBA to carry out an ecological assessment with recommendations to protect wildlife for a number of proposed housing development sites across Solihull (HBA & Ecological Services, 2016). These assessments include one site within the parish of Meriden; West of Meriden.

The site assessments and recommendations are reproduced below as part of the parish plan review.

West of Meriden

Area: 4 hectares

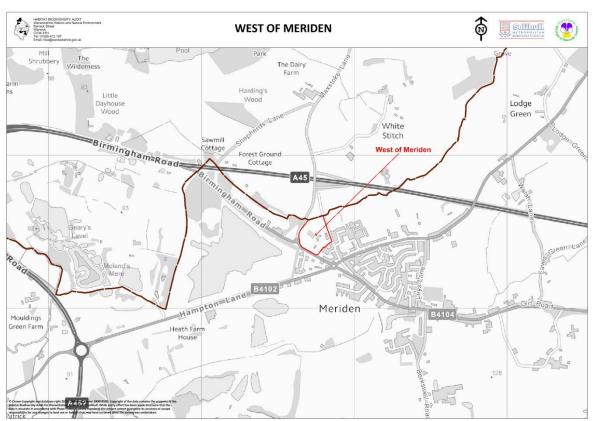


Figure 11 Proposed Site Location: - West of Meriden

Overview

West of Meriden is located between the Birmingham Road (B4104) and Maxstoke Lane. The site is a proposed extension to existing housing development to the west of Meriden along Maxstoke Close and Maxstoke Lane to the east. Beyond the Maxstoke Lane lies open countryside. To the south across the Birmingham Road is a former

gravel extraction site which is now filled with water, known as Area G of Meriden Quarry Holdings. The gravel quarry is surrounded by broad-leaved plantation woodland.

The site itself contains some existing buildings surrounded by grassland and scrubland. The site also has a large pool on the western edge of the site, and to the north is a small stream. The site is surrounded by hedgerows that have become dense scrub. Housing development has taken place close to the site south of the brook on the northern extent of residential Meriden.

Key Features

- Fields Potential Local Wildlife Site (SP28G4)
- Semi-improved grassland
- Scrubland
- Pond
- Hedgerows

Recommendations

The site is part of a potential local wildlife site (Fields SP28G4) which has been recommended for survey but permission to survey has not been granted. The site has an interesting mix of habitats and there is potential for it to be incorporated into a larger local wildlife site incorporating the grassland, open scrub and pond with other nearby habitats.

There are onsite and offsite opportunities to restore the grassland to semi-improved quality, reduce the density of scrub and protect the pond and maintain habitat connectivity along the stream and amongst stretches of hedgerows.

Scrub can be very valuable for a wide range of wildlife, providing a continued source of nectar, fruits, seeds, and shelter, breeding and roosting sites. A stand of scrub with varied plant species, age and structure will support a great variety of species. Scrub is the transitory stage between open habitats such as grassland and closed canopy woodland and as such has to be managed to maintain a mosaic within more open habitats.

Scrub is particularly important for invertebrates, amphibians and reptiles, birds and mammals. It is important to maintain a balance between scrub and open habitat with species of particular conservation importance. Work on scrub is preferably best carried out in autumn/winter ideally early February and never between the bird breeding season from March – August. Berry bearing scrub is best delayed until after December has to retain valuable autumn and winter food sources.

The aim would be to establish a scrub of varied age, species and structure maintaining all growth stages, from bare ground through to young and older growth. The scrub should be cut in rotation aiming at retaining these varied ages of scrub by cutting small patches equating to 20% every three years between September and February

To prevent prolific scrub encroachment, accompanying grassland should be cut every 3-5 years. The excessive scrubbing up of the accompanying may will reduce habitat diversity.

Cutting rank grasslands can have a great impact on invertebrate and particularly reptile populations. Parts of the site should be left un-cut to accommodate refuges for less mobile species. Sudden management changes should be avoided and may not encourage greater diversity.

Cuttings should be removed to avoid smothering low-growing herbs and fine grasses.

Isolated specimens of scrub should be retained in-situ but maintained by periodic coppicing every 3-5 years.

Any associated potentially species-rich or characteristic hedgerows should be subject to a full hedgerow survey detailed in the Hedgerow Survey Handbook (2nd edition) under The Hedgerows Regulations (made under Section 97 of the Environment Act 1995).

The brook should be managed and maintained in accordance with the scrub and accompanying hedgerows. It should be cleaned every five years and overhanging branches cut likewise. Cleaning ditches or sections infrequently will keep them moist whilst retaining aquatic plants and decomposing debris. Any marginal habitat should be mown every three years on a rotational basis. Larger trees like willows and sallow should be coppiced on an approximately 3-5 year cycle to maintain young thick growth and the products from coppicing should be stacked as woodpiles.

Constraints Map

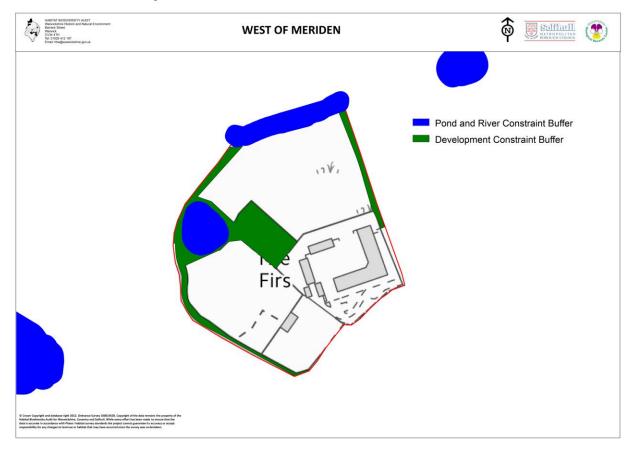


Figure 12 Constraints Map

The areas marked in green and blue on the above constraints map indicate where development should be avoided and ecological enhancement encouraged.

They include:

- 30m buffer around woodland
- 8m buffer either side of adjacent to watercourses
- 8m buffers around ponds
- 5m buffer either side of intact hedgerows
- Areas of medium to high distinctiveness grassland (Values 4, 5 & 6)

Designated Sites

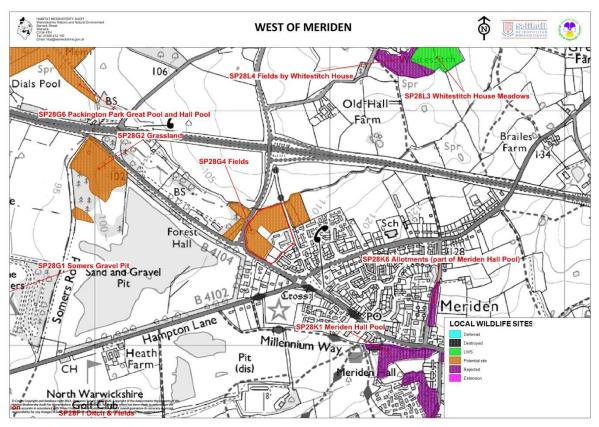


Figure 13: Site Designations

A large component of the development encompasses a potential Local Wildlife Site and as a consequence the site should be subject to an LWS standard survey.

Phase 1 habitats and Distinctiveness:

The site consists of area of poor semi-improved grassland (B6) with a medium habitat distinctiveness and open scrubland (A22) with a medium to high distinctiveness. Dense scrub (A21) occupies medium distinctiveness. The site contains a large pond (G1) which is a priority habitat with high distinctiveness

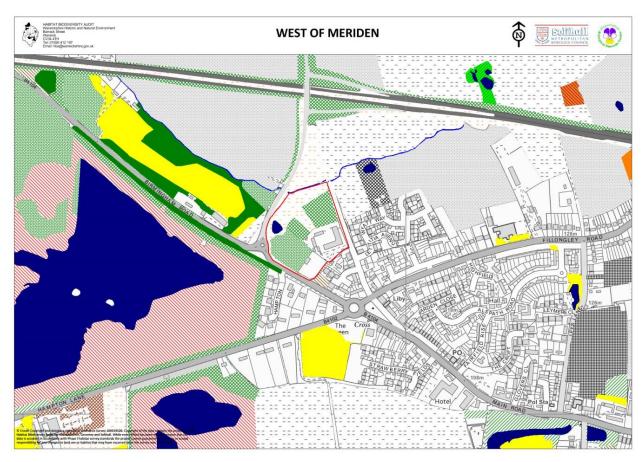


Figure 14: Phase 1 habitat survey



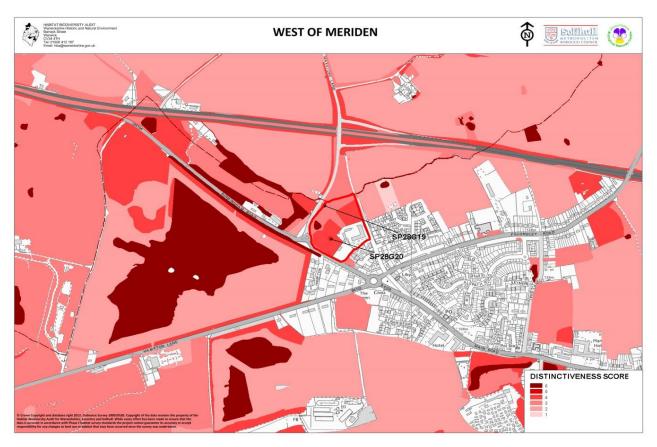


Figure 15: Habitat Distinctiveness

Distinct habitats of scrub, poor semi-improved grassland, pond and a brook of running water are of particular importance.

Target Notes

Number	Grid Reference	Survey Date	
SP28G19	SP2368682553	15/12/1998	

Large area of poor semi improved grassland dominated by cock's-foot (Dactylis glomerata) with frequent to abundant false oat-grass (Arrhenatherum elatius), common bent (Agrostis capillaris), ribwort plantain (Plantago lancelota), common ragwort (Senecio jacobaea), common nettle (Urica dioica) and hogweed (Heracleum sphondylium).

SP28G20 SP 2370982427 15/12/1998

Two horse-grazed semi-improved grasslands which were difficult to assess due to grazing intensity but contains common bent (Agrostis capillaris) with Yorkshire-fog (Holcus lanatus), red clover (Trifolium pratense), common sorrel (Rumex acetosa), creeping (Ranunculus repens) and meadow buttercup (R. acris), yarrow (Achillea millefolium) and autumn hawkbit (Leontodon autumnalis).

The grassland is accompanied by a sizeable pond that contains branched bur-reed (Sparganium erectum), soft rush (Juncus effusus), Yellow water-lily (Nuphar lutea), duckweed (Lemna spp.) and water forget-me-not (Myosotis scorpioides). Good potential for amphibians.

UPDATE 26/06/2013:

Mosaic of scattered scrub developed from poor-semi-improved grassland surrounded by dense scrub off Birmingham Road. Pond was un-accessible due to dense scrub and restricted access.

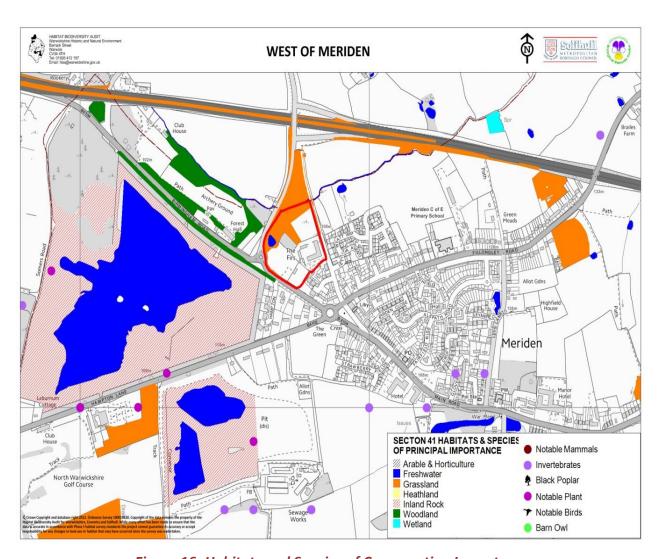


Figure 16: Habitats and Species of Conservation Importance

Habitat Connectivity

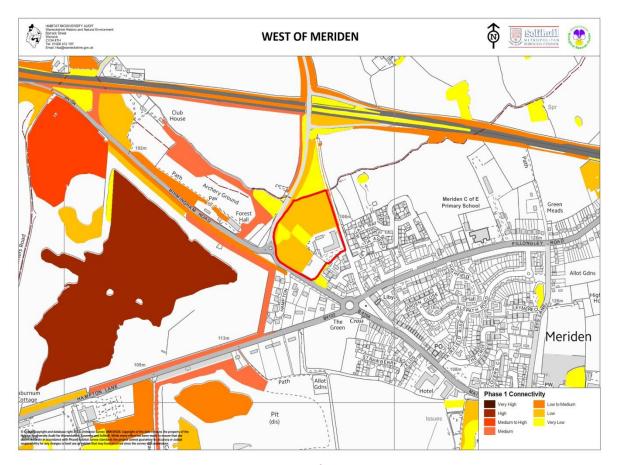


Figure 17: Habitat connectivity

The open scrub and grassland habitats within and immediately adjacent to the development parcel occupy low to very low habitat connectivity principally due to habitat fragmentation and isolation caused by the intersecting road network with Meriden acting as a residential barrier to the east.

Protected Species

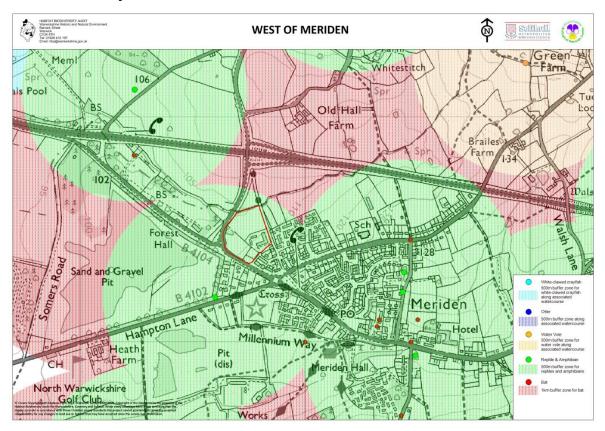


Figure 18: Protected Species

Records for common frog (Rana temporaria) and common toad (Bufo bufo) occurred in 1996 within broad-leaved plantation woodland immediately adjacent to Area G with Meriden Quarry Holdings 225m away from the development parcel.

Likewise, recent records exist from 2011 to 2014 for common frog, common toad and smooth newt (Lissotriton vulgaris) on Leys Lanes lying along the western border of the village of Meriden.

In regard to bat activity, foraging and roosting records do occur within and adjacent to residential properties of Meriden ranging from the years of 1992, 2000, 2010 and 2014 respectively.

Potential Local Wildlife Site Review West of Meriden, Fields (SP28G4)

Introduction

A preliminary ecological assessment was undertaken on designated sites within the development parcel with the intention to determine ecological significance and to coincide with methodology as part of the well-established processes of the Local Wildlife Sites project with the Habitat Biodiversity Audit for Warwickshire, Solihull and Coventry.

Local wildlife sites contain features of substantive nature conservation value and the purpose of selection is to provide recognition of those features by affording those sites a degree of protection within potential development plans.

As part of recommendations made in previous reports detailed under the Solihull Metropolitan Borough Council Additional Site Options Ecological Assessment for the West of Meriden development parcel; "A large component of the development encompasses a potential Local Wildlife Site and as a consequence the site should be subject to an LWS standard survey."

To consider the biodiversity value, a follow up preliminary LWS appraisal was carried out to identify any potentially valuable features within the following designated sites including;

Potential Local Wildlife Site Fields (SP28G4)

The development parcel comprises a mixture of grassland and scrubs either side of Maxstoke Lane. The potential LWS compartment east of Maxstoke Lanes comprises of improved grassland heavily grazed by horses. The associated scrub of the cycle path leading north comprises of typical shrubs including bramble (Rubus fruticosus agg.), ivy (Hedera helix), holly (Ilex aquilfolium), hazel (Corylus avellana), hawthorn (Crateagus monogyna) and English elm (Ulmus procera). The scrub immediately west is similarly composed and dominates amongst rank poor semi-improved grassland. With the addition of encroaching dense blackthorn which previously marked the field boundary. The dense blackthorn and hawthorn scrub forms immediately behind The Firs Nursing Home and surrounds a pond which was previously noted as holding some ecological value.

The pond is heavily marginalised by bramble, blackthorn, hawthorn, common nettle and hogweed (Heracleum sphondylium) but some open water does exist in its centre. Access to the waterside due to the dense vegetation is very limited.

The southern field parcel comprises of poor semi-improved grassland with the southern boundary marked by palisade fencing and broad-leaved plantation of hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), pedunculate oak (Quercus robur),

field maple (Acer campestre), blackthorn (Prunus spinosa), hazel (Corylus avellana), small-leaved lime (Tilia cordata), common nettle, guelder rose (Viburnum opulus), dog rose (Rosa canina) and Italian alder (Alnus cordata) with a ground cover of hedgerow crane's-bill (Geranium pyrenaicum) and garlic mustard (Allaria petiolata).

The un-managed grassland comprises of common and coarse grasses of false-oat grass (Arrhenatherum elatius), cock's-foot (Dactylis glomerata), common bent (Agrostis capillaris) and sweet vernal-grass (Anthoxantum odoratum) alongside red fescue (Festuca rubra) with forbs of common sorrel (Rumex acetosa), germander speedwell (Veronica chamaedrys), creeping buttercup (Ranunculus repens), oxford (Senecio squalidus) and common ragwort (S. jacobaea), ribwort plantain (Plantago lancelota), yarrow (Achillea millefolium), common mouse-ear (Cerastium fontanum), common bird's-foot-trefoil (Lotus corniculatus) within the rank grass sward. The line of poplar (Populus spp.) trees marks the north-eastern boundary.

Across the roundabout and the main Maxstoke Lane sits a joint component of the potential LWS. Broad-leaved plantation curtails the roundabout corner where improved grassland is bordered by semi-natural woodland both planted and self-sown with pedunculate oak (Quercus robur) and a line of poplars (Populus spp.). This woodland has been reimbursed by a much younger plantation to the north to form a connective link with that woodland that follows a small brook north of the archery ground.

Recommendations

The development parcel contains un-managed grassland and scrub with developing trees which is not of significant ecological quality to warrant a further in-depth LWS survey. Ecological mitigation measures detailed in the Solihull Metropolitan Borough Council Additional Site Options Ecological Assessment should be followed but no follow up actions are required as part of the LWS process.

In summary, the curtilage of the development parcel should be retained encompassing standard trees, hedgerows and scrub particularly on its boundaries. This will help maintain the sites existing green aspect. The pond should also be kept intact. The presence of grassland and scrub still permits the presence of protected reptiles and amphibians and these as such should be surveyed for appropriately. Photos are shown overleaf.

Site Pictures

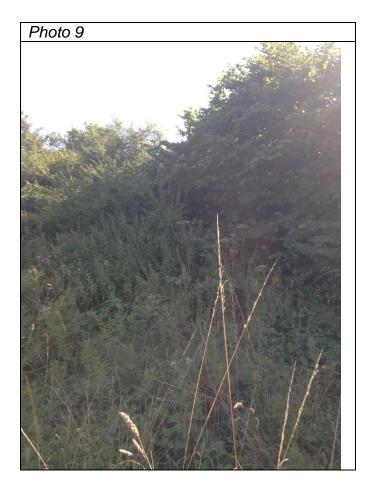












Appendix

Meriden Target Notes Parish Report

Meriden Hill Cutting Local Geological Site Report

Local Wildlife Citations

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Tetrad: SP28F

Target note 1 Survey Date: 21/08/1998 OS Grid Ref: SP2322681669

Heavily vegetated ditch containing abundant reed canary-grass (Phalaris arundinacea), creeping buttercup (Ranunculus repens), brooklime (Veronica beccabunga), soft rush (Juncus effusus). common nettle (Urtica dioica), fool's water-cress (Apium nodiflorum), red shank and some Scripus sylvaticus.

Target note 15 Survey Date: 21/08/1998 OS Grid Ref: SP2230981413

alder woodland (Alnus glutinosa) with frequent mature Pedunculate oak (Quercus robur), birch and some localised beech (Fagus sylvatica). The understorey includes frequent elder (Sambucus nigra), hawthorn (Crataegus monogyna) and some willow with a groundflora dominated by bramble (Rubus fruticosus agg.) with frequent broad buckler-fern (Dryopteris dilatata), common nettle (Urtica dioica), honeysuckle (Lonicera periclymenum) and red campion (Silene dioica). Some hollows contain abundant creeping buttercup (Ranunculus repens), lesser spearwort (Ranunculus flammula) and marsh bedstraw (Galium palustre). The area may be drying out due to nearbyroad improvements.

Target note 16 Survey Date: 21/08/1998 OS Grid Ref: SP2244081440

Sycamore plantation and broad-leaved woodland of birch and oak which gradesinto low wet alder woodland (Alnus glutinosa) to the south. The ground flora varies with themoisture of the soil but includes abundant bluebell (Hyacinthoides non-scripta), bracken (Pteridium aquilinum), foxglove (Digitalis purpurea) and Dryopteris dilatata on the drier areas, nettle with Athyrium filix-femina, broad buckler-fern (Dryopteris dilatata) and red campion in the hollows. Some of the hollows arewater filled and are dominated by willow.

Target note 17 Survey Date: 21/08/1998 OS Grid Ref: SP2268981426

Rough grazing and rush pasture dominated by Yorkshire-fog (Holcus lanatus), Agrostiscapillaris, tufted hair-grass (Deschampsia cespitosa) with frequent sorrel, meadow buttercup (Ranunculus acris), some marsh thistle (Cirsium palustre), common bird's-foot-trefoil (Lotus corniculatus), sheep's sorrel (Rumex acetosella), hairy sedge (Carex hirta) and meadowsweet (Fillipendula ulmaria). jointed rush (Juncus articulatus), soft rush (Juncus effusus) and lesser spearwort are locally abundant in areas where cattle grazing is reduced particularly between the fence and ditch with frequent hairy sedge (Carex hirta), some ragged-robin (Lychnis flos-cuculi), greater bird's-foot-trefoil (Lotus pedunculatus) and great burnet. The drainage ditch includes abundant reed canary-grass (Phalaris arundinacea) and brooklime (Veronica beccabunga).

Target note 18 Survey Date: 21/08/1998 OS Grid Ref: SP2269881250

Rush pasture with abundant jointed rush (Juncus articulatus), lesser spearwort (Ranunculus flammula), hairy sedge (Carex hirta), marsh foxtail (Alopecurus geniculatus) and creeping buttercup (Ranunculus repens). marsh bedstraw (Galium palustre), floating sweet-grass (Glyceria fluitans), Juncus bufonis, common sorrel (Rumex acetosa), ragged-robin (Lychnis flos-cuculi), cat's-ear (Hypochaeris radicata) and silverweed alsooccur. The ground is heavily poached by cattle in places. The drier banks upto the golf course have become part dominated by thistle but also includeabundant crested dog's-tail (Cynosurus cristatus) and frequent ribwort plantain (Plantago lancelota), autumn hawkbit (Leontodon autumnalis) and common knapweed (Centaurea nigra).

Target note 19 Survey Date: 21/08/1998 OS Grid Ref: SP2221081390

Roadside verge dominated by false oat-grass (Arrhenatherum elatius), common bent (Agrostis capillaris) with frequent common knapweed (Centaurea nigra), abundant ribwort plantain (Plantago lancelota) with common vetch (Vicia sativa), meadow buttercup (Ranunculus acris)cat's-ear (Hypochaeris radicata), perforate st john's wort, red clover (Trifolium pratense) and bird'sfoot trefoil. Includes some oak and gorse encroachment.

Tetrad: SP28G

Target note 1 Survey Date: 15/12/1998 OS Grid Ref: SP2293782609

Small open grassland surrounded by a pine plantation. Calliergoncuspidatum and Rhytidiadelphus squarrosus dominate much of the area with locally abundant creeping buttercup (Ranunculus repens), frequent hairy sedge (Carex hirta), common bent (Agrostis capillaris) and Yorkshire-fog (Holcus lanatus). Common centuary and ragwort are frequent throughout muchof the site with thyme-leaved speedwell, perforate st john's wort, selfheal (Prunella vulgaris) and and wild teasel (Dipsacus fullonum). Heavily rabbit grazed.

Target note 2 Survey Date: 15/12/1998 OS Grid Ref: SP2295382800

Expanse of poor semi-improved grassland dominated by false oat-grass (Arrhenatherum elatius) with abundant Yorkshire-fog (Holcus lanatus), common bent (Agrostis capillaris), creeping cinquefoil (Potentilla reptans), red clover (Trifolium pratense), ribwort plantain (Plantago lancelota), yarrow (Achillea millefolium) with lesser trefoil (Trifolium dubium), common ragwort (Senecio jacobaea) germander speedwell (Veronica chamaedrys), common vetch (Vicia sativa), common bird's-foot-trefoil (Lotus corniculatus), perforate St John's-wort (Hypericum perforatum), horse-radish (Armoracia rusticana), a mullein and locally frequent common centaury (Centaurium erythraea).

Target note 11 Survey Date: 15/12/1998 OS Grid Ref: SP2211282064

Managed flood meadow locally dominated by soft rush (Juncus effusus) with locallyabundant sharp-flowered rush (Juncus acutiflorus), meadow fox-tail (Alopecurus pratensis), Yorkshire-fog (Holcus lanatus), creeping buttercup (Ranunculus repens), reed sweet-grass (Glyceria maxima) ragged-robin (Lychnis flos-cuculi), marsh thistle (Cirsium palustre), hairy sedge (Carex hirta) and greatcommon bird's-foot-trefoil (Lotus corniculatus).

Target note 12 Survey Date: 15/12/1998 OS Grid Ref: SP2204682064

Road verge containing linear expanses of buck's-horn plantain. Alsodominated by red fescue (Festuca rubra), ribwort plantain (Plantago lancelota), common knapweed (Centaurea nigra), flattened meadow-grass (Poa compressa), oxeye daisy (Leucanthemum vulgare) and yarrow (Achillea millefolium).

Target note 18 Survey Date: 15/12/1998 OS Grid Ref: SP2386082569

Horse grazed species-rich semi-improved grassland dominated by common bent (Agrostis capillaris), Yorkshire-fog (Holcus lanatus) and red fescue (Festuca rubra) with frequent sweet vernal-grass (Anthoxanthum odoratum), crested dog's-tail (Cynosurus cristatus) and containing abundant common knapweed (Centaurea nigra), ribwort plantain (Plantago lancelota), creeping buttercup (Ranunculus repens) with locally frequent common ragwort (Senecio jacoabea), common sorrel (Rumex acetosa) and selfheal (Prunella vulgaris) with patches of common nettle (Urtica dioica).

Target note 19 Survey Date: 15/12/1998 OS Grid Ref: SP2368682553

Large poor semi-improved grassland dominated by cock's-foot (Dactylis glomerata) with frequent to abundant false oat-grass (Arrhenatherum elatius), common bent (Agrostis capillaris), ribwort plantain (Plantago lancelota), common ragwort (Senecio jacobaea), common nettle (Urica dioica) and hogweed (Heracleum sphondylium).

UPDATE 26/06/2013 GP

Mosaic of poor semi-improved grassland bordered by broad-leaved plantation of Maxstoke Lane and parcels of scattered and dense scrub.

Target note 20 Survey Date: 15/12/1998 OS Grid Ref: SP2370982427

Two horse-grazed semi-improved grasslands which were difficult to assess due to grazing intensity but contains common bent (Agrostis capillaris) with Yorkshire-fog (Holcus lanatus), red clover (Trifolium pratense), common sorrel (Rumex acetosa), creeping (Ranunculus repens) and meadow buttercup (R. acris), yarrow (Achillea millefolium) and autumn hawkbit (Leontodon autumnalis).

The grassland is accompanied by a sizeable pond that contains branched bur-reed (Sparganium erectum), soft rush (Juncus effusus), Yellow water-lily (Nuphar lutea), duckweed (Lemna spp.) and water forget-me-not (Myosotis scorpioides). Good potential for amphibians.

UPDATE 26/06/2013 GP

A mosaic of scattered scrub developed from poor-semi-improved grassland surrounded by dense scrub off Birmingham Road. Pond was un-accessible due to dense scrub and restricted access.

Target note 21 Survey Date: 15/12/1998 OS Grid Ref: SP2384782216

Poor semi-improved grassland dominated by common bent (Agrostis capillaris) with Yorkshire-fog (Holcus lanatus) red clover (Trifolium pratense), common sorrel (Rumex acetosa), creeping and meadow buttercup (Ranunculus acris)yarrow (Achillea millefolium), autumnhawkbit and locally abundant ribwort plantain (Plantago lancelota).

Target note 22 Survey Date: 15/12/1998 OS Grid Ref: SP2313182813

Old plantation with large coppice sycamore (Acer pseudoplatanus), lime, sweet chestnut (Castanea sativa) and pedunculate oak (Quercus robur). The understorey is sparse with a ground flora containing abundant bracken (Pteridium aquilinum), ivyand dog's mercury with red campion (Silene dioica), foxglove (Digitalis purpurea) and wood sage (Teucrium scorodonia). An area ofprobable conifer felling has resulted in a clearing dominated by bracken (Pteridium aquilinum).

Target note 37 Survey Date: 03/06/2009 OS Grid Ref: SP2385282142

Marsh area containing abundant sharp-flowered rush (Juncus acutiflorus), common bent (Agrostis capillaris), Cynosurus cristatus with Yorkshire-fog (Holcus lanatus), creeping buttercup (Ranunculus repens), lesser stitchwort (Stellaria graminea), wavy bittercress, velvet bent (Agrostis canina) meadow buttercup (Ranunculus acris)hard rush (Juncus inflexus), Juncus

effusus, common ragwort (Senecio jacobaea) and an area of hairy sedge (Carex hirta). Contains mature oaks and a lichen encrusted elm stump.

Tetrad: SP28K

Target note 1 Survey Date: 02/09/1998 OS Grid Ref: SP2424081927

Large elongated pond which contains mallard moorhen (Gallinula chloropus) and mute swan. Athird of the pond area is dominated by yellow water lily with emergentamphibious bistort marginal yellow iris and great willowherb to the south-east of the pool. Much of the banking is quite steep and lined with alder and willow some of which are leaning into the pool. Toads and hawker dragonflieswere noted.

Target note 2 Survey Date: 02/09/1998 OS Grid Ref: SP2425681979

Old policy woodland with beech lime yew (Taxus baccata) and alder (Alnus glutinosa). Has a fairly opencanopy with young sycamore holly (Ilex aquifolium) a ground flora dominated by tall herbssuch as nettle (Urica dioica) and thistle. hairy-brome (Bromopsis ramosa) herb robert wood avens hedge woundwort (Stachys sylvatica) and enchanter's nightshade also occur.

Target note 3 Survey Date: 02/09/1998 OS Grid Ref: SP2410681875

Small canalised brook with some geological exposures along the bed. Species poor with brooklime nettle thistle great willowherb (Epilobium hirsutum) and surrounded by perennial ryegrass (Lolium perenne) Cynosurus cristatus dominated improved grassland. Some of the dry bare banks have been colonised by mining bees.

Target note 4 Survey Date: 02/09/1998 OS Grid Ref: SP2407681672

Area of open birch plantation with some oak and frequent elder (Sambucus nigra). the ground flora is rather poor and dominated by nettle (Urica dioica) and Holcus mollis with somefoxglove (Digitalis purpurea). Grazed by sheep.

Target note 5 Survey Date: 02/09/1998 OS Grid Ref: SP2450881940

Village duck pond with abundant submerged canadian waterweed (especiallyin the west) with amphibious bistort (Persicaria amphibia) and yellow water lily. Some emergentyellow iris and Phalaris arundinacea form a dense stand in the south and eastwith a number of trees such as ash white willow oak and alder lining the banks. An island in the centre of the pool pond has great willowherb with goat willow weeping willow and young horse chestnut (Aesculus hippocastanum). The area is bounded to the south bya bank which has been planted up with dogwood (Cornus sanguinea) and surrounded by banks of nettle. An area of amenity ground lies to the east which has been planted up withtrees. Mallard moorhen (Gallinula chloropus) and migrant hawker were noted.

Target note 6 Survey Date: 02/09/1998 OS Grid Ref: SP2442081773

Old plantation with some mature oak ash lime occasional pine and sweetchestnut. Contains frequent young sycamore oak elder (Sambucus nigra) and hawthorn (Crataegus monogyna) with aground flora dominated by bramble some ivy wood dock occasional Dryopterisfilix-mas wood avens (Geum urbanum) and enchanter's-nightshade (Circaea lutetiana).

Target note 7 Survey Date: 02/09/1998 OS Grid Ref: SP2441781587

Rich overgrown roadside hedge. Species include oak holly elder sycamorehawthorn elm blackthorn dog-rose field maple ash (Fraxinus excelsior) andhazel (Corylus avellana). Much of the hedgeis on very steep banking with species such as foxglove bramble nettle lord'sand ladies ground-ivy (Glechoma hederacea) bracken (Pteridium aquilinum) and ivy (Hedera helix). Includes some geological exposures.

Target note 8 Survey Date: 02/09/1998 OS Grid Ref: SP2449581518

Very poor semi-improved grassland dominated by Yorkshire-fog (Holcus lanatus) agrostiscapillaris with cock's-foot (Dactylis glomerata)false oat-grass (Arrhenatherum elatius)creeping buttercuppatches of nettle thistle and dock (Rumex spp.).

Target note 9 Survey Date: 02/09/1998 OS Grid Ref: SP2453581492

Large stocked pool with a bank of emergent Typha latifolia to the northwith oak ash (Fraxinus excelsior) andhawthorn dominated elsewhere. Great willowherb nettle soft rush (Juncus effusus) and bittersweet (Solanum dulcamara) also occur.

Target note 13 Survey Date: 02/09/1998 OS Grid Ref: SP2524281708

Church yard dominated by Yorkshire-fog (Holcus lanatus) with Arrhenatherum elatiusAgrostis capillaris Anthoxanthum odoratum contains locally dominated sheep'ssorrel with frequent sorrel cat's-ear (Hypochaeris radicata) and common knapweed (Centaurea nigra). Also containsharebell yarrow autumn hawkbit hogweed ribwort plantain (Plantago lancelota) with some foxglovearound the perimeter.

Target note 14 Survey Date: 02/09/1998 OS Grid Ref: SP2519381920

Rough improved pasture which contains some very mature oak and sweetchestnut.

Target note 15 Survey Date: 02/09/1998 OS Grid Ref: SP2530781960

Dense broad-leaved plantation within a disused quarry. The canopy is dominated by lime with some ash (Fraxinus excelsior) andan understorey dominated by tall elm elderholly patches of grape laurel occasional young sycamore (Acer pseudoplatanus) and horse chestnut (Aesculus hippocastanum). The ground flora is dominated by ivy and dog's mercury (Mercurialis perennis). Contains geologicalexposures.

Target note 16 Survey Date: 02/09/1998 OS Grid Ref: SP2538381966

Dense broad-leaved plantation within a disused quarry. Canopy includesbeech ash oak horse chestnut and sycamore with an understorey of tall elm elderholly (Ilex aquifolium) hazel (Corylus avellana). The ground flora is dominated by ivy (Hedera helix) with herb robert dog'smercury bramble broad buckler-fern (Dryopteris dilatata) and Dryopteris filix- mas. Containsgeological exposures.

Target note 17 Survey Date: 02/09/1998 OS Grid Ref: SP2553681188

Semi-natural woodland of dominated by birch with oak occasional rowan (Sorbus aucuparia) and some hazel coppice. The ground flora includes abundant bluebell (Hyacinthoides non-scripta) and Yorkshire-fog (Holcus lanatus) with patches of bramble (Rubus fruticosus agg.). The pools around the northern edge of the sitehave become heavily overshadowed.

Target note 18 Survey Date: 02/09/1998 OS Grid Ref: SP2605881066

Silver birch woodland (Betula pendula) with occasional oak (Quercus robur) and an understorey of hawthorn (Crataegus monogyna), hazel (Corylus avellana), rowan (Sorbus aucuparia), holly (Ilex aquifolium), elder (Sambucus nigra) and crab apple (Malus sylvestris). The ground flora is dominated by bracken (Pteridium aquilinum) with creeping soft-grass (Holcus mollis), foxglove (Digitalis purpurea), honeysuckle (Lonicera periclymenum) and wood sorrel. Pond dried out at time of visit (07/09/2005).

Tetrad: SP28L

Target note 1 Survey Date: 19/04/2000 OS Grid Ref: SP2444482800

Poor semi-improved grassland dominated by common bent (Agrostis capillaris) and Yorkshire-fog (Holcus lanatus) with tufted hair-grass (Deschampsia cespitosa), creeping buttercup (Ranunculus repens), common sorrel (Rumex acetosa), Alopecuruspratensis and patches of thistle. Contains a recently constructed pooldominated by soft rush (Juncus effusus).

Target note 8 Survey Date: 19/04/2000 OS Grid Ref: SP2481783407

Pool mainly dominated by Glyceria plicata with patches of Potamogetonnatans. Potential newt site.

Target note 9 Survey Date: 19/04/2000 OS Grid Ref: SP2481483313

Heavily cattle grazed, poor semi-improved grassland dominated by Agrostiscapillaris, abundant crested dog's-tail (Cynosurus cristatus), ribwort plantain (Plantago lancelota) and cat's-ear (Hypochaeris radicata) withlocally frequent sorrel, yarrow (Achillea millefolium) and smooth meadow-grass (Poa pratensis). The grasslands are dividedby grazed hedgerows of holly (Ilex aquifolium), blackthorn (Prunus spinosa) and hawthorn (Crataegus monogyna) with bramble (Rubus fruticosus agg.), foxglove (Digitalis purpurea), sheep's sorrel (Rumex acetosella), cat's-ear (Hypochaeris radicata) and autumn hawkbit (Leontodon autumnalis).

Target note 10 Survey Date: 19/04/2000 OS Grid Ref: SP2505983427

Heavily cattle grazed, poor semi-improved grassland dominated by Agrostiscapillaris, abundant crested dog's-tail (Cynosurus cristatus), ribwort plantain (Plantago lancelota) and cat's-ear (Hypochaeris radicata) withlocally frequent sorrel, yarrow (Achillea millefolium) and smooth meadow-grass (Poa pratensis). The grasslands are dividedby grazed hedgerows of holly (Ilex aquifolium), blackthorn (Prunus spinosa) and hawthorn (Crataegus monogyna) with bramble (Rubus fruticosus agg.), foxglove (Digitalis purpurea), sheep's sorrel (Rumex acetosella), cat's-ear (Hypochaeris radicata) and autumn hawkbit (Leontodon autumnalis).

Target note 11 Survey Date: 19/04/2000 OS Grid Ref: SP2500083353

Heavily cattle grazed, poor semi-improved grassland dominated by Agrostiscapillaris, abundant crested dog's-tail (Cynosurus cristatus), ribwort plantain (Plantago lancelota) and cat's-ear (Hypochaeris radicata) withlocally frequent sorrel, yarrow (Achillea millefolium) and smooth meadow-grass (Poa pratensis). The grasslands are dividedby grazed hedgerows of holly (Ilex aquifolium), blackthorn (Prunus spinosa) and hawthorn (Crataegus monogyna) with bramble (Rubus fruticosus agg.), foxglove (Digitalis purpurea), sheep's sorrel (Rumex acetosella), cat's-ear (Hypochaeris radicata) and autumn hawkbit (Leontodon autumnalis). Includes a pond with banks partlined by oak with locally abundant creeping cinquefoil (Potentilla reptans).

Target note 12 Survey Date: 19/04/2000 OS Grid Ref: SP2506883333

Heavily cattle grazed, poor semi-improved grassland dominated by Agrostiscapillaris, abundant crested dog's-tail (Cynosurus cristatus), ribwort plantain (Plantago lancelota) and cat's-ear (Hypochaeris radicata) withlocally frequent sorrel, yarrow (Achillea millefolium) and smooth meadow-grass (Poa pratensis).

Target note 13 Survey Date: 19/04/2000 OS Grid Ref: SP2504883267

Heavily cattle grazed, poor semi-improved grassland dominated by Agrostiscapillaris, abundant crested dog's-tail (Cynosurus cristatus), ribwort plantain (Plantago lancelota), Luzula campestrisand cat's-ear (Hypochaeris radicata) with locally frequent sorrel, yarrow (Achillea millefolium) and smooth meadow-grass (Poa pratensis).

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Target note 14 Survey Date: 19/04/2000 OS Grid Ref: SP2514283151

Tall ruderal dominated by thistle, common ragwort (Senecio jacobaea) with wild teasel (Dipsacus fullonum) and small openareas of poor semi-improved grassland dominated by common bent (Agrostis capillaris) with Yorkshire-fog (Holcus lanatus), creeping buttercup (Ranunculus repens) and ribwort plantain (Plantago lancelota). Lined with japaneseknotweed along the roadside. Changes noted on 12/09/2005 by KRM: patches of poor semi-improved grassland have diminished.

Target note 15 Survey Date: 19/04/2000 OS Grid Ref: SP2509183145

Neglected but at one time horse grazed grassland dominated by Yorkshire-fog (Holcus lanatus) with red fescue (Festuca rubra), cock's-foot (Dactylis glomerata), common bent (Agrostis capillaris), frequentcommon ragwort (Senecio jacobaea) hogweed (Heracleum sphondylium), wild teasel (Dipsacus fullonum), small teasel (Dipsacus pilosus), ladies mantle, common vetch (Vicia sativa), creeping cinquefoil (Potentilla reptans), patches of ribwort plantain (Plantago lancelota), selfheal (Prunella vulgaris) cat's-ear (Hypochaeris radicata) and includes someorchid - probably common spotted. Contains japanese knotweed along hedge line. Changes noted on 12/09/2005 by KRM: tall ruderal patch has now encroached into this area.

Target note 16 Survey Date: 19/04/2000 OS Grid Ref: SP2561583797

Pine plantation with occasional birch, Pedunculate oak (Quercus robur), a block of red oak (Quercus rubra) and asparse understorey of birch, rowan (Sorbus aucuparia) and holly (Ilex aquifolium). The ground flora is dominated bybracken (Pteridium aquilinum) and bramble (Rubus fruticosus agg.) with locally frequent soft rush (Juncus effusus). foxglove (Digitalis purpurea), hedgewoundwort, red campion (Silene dioica), wood millet (Milium effusum), herb-Robert (Geranium robertianum), bluebell (Hyacinthoides non-scripta), wood sage (Teucrium scorodonia), wavy hair-grass (Deschampsia flexuosa), locally abundant wood meadow-grass (Poa nemoralis). Water pepper is frequentin wet rides with common water-starwort (Callitriche stagnalis), creeping buttercup (Ranunculus repens) and redshank (Persicaria maculosa). Stinkhorn is locally frequent.

Target note 17 Survey Date: 19/04/2000 OS Grid Ref: SP2547583923

Wet hollow within a pine plantation containing birch, rowan (Sorbus aucuparia), holly (Ilex aquifolium), elder (Sambucus nigra) and field maple (Acer campestre). The area is largely dominated by Sphagnum squarrosum withsoft rush (Juncus effusus). broad buckler-fern (Dryopteris dilatata), Glyceria plicata and common water-starwort (Callitriche stagnalis). Plagiomnium undulatum, common feather-moss (Eurhynchium praelongum), Dicranella heteromalladominate the field layer around the hollow with frequent liverworts - beyondwhich bracken dominates the ground flora with honeysuckle (Lonicera periclymenum).

Target note 18 Survey Date: 19/04/2000 OS Grid Ref: SP2577783000

Larch plantation with locally frequent birch (Betula sp.), some Pedunculate oak (Quercus robur), hazel (Corylus avellana) and rowan (Sorbus aucuparia). The ground flora is dominated by bracken (Pteridium aquilinum), bramble (Rubus fruticosus agg.) with male-fern (Dryopteris filixmas), locally dominant wood sage (Teucrium scorodonia), rosebay willowherb (Chamerion angustifolium), broad buckler-fern (Dryopteris dilatata) andfoxglove (Digitalis purpurea). yellow pimpernel, soft rush (Juncus effusus) and selfheal are locally abundantalong the rides with red campion (Silene dioica), wood sorrel and heath bedstraw (Galium saxatile).

Target note 19 Survey Date: 19/04/2000 OS Grid Ref: SP2594883190

Beech plantation with locally frequent holly (Ilex aquifolium), birch, rowan (Sorbus aucuparia) and hazel (Corylus avellana). The ground flora includes tufted hair-grass (Deschampsia cespitosa), wavy hair-grass (Deschampsia flexuosa), honeysuckle (Lonicera periclymenum), bracken (Pteridium aquilinum), bramble (Rubus fruticosus agg.), locally dominant bluebell (Hyacinthoides non-scripta) and Dryopterisdilatata. Also contains Polytrichum formosum and sulphur tuft mushroom.

Target note 20 Survey Date: 19/04/2000 OS Grid Ref: SP2588383148

Wet birch woodland with locally abundant hazel (Corylus avellana). The ground flora is dominated by bramble (Rubus fruticosus agg.) with areas of Sphagnum squarrosum, some Dryopterisdilatata and honeysuckle (Lonicera periclymenum).

Target note 21 Survey Date: 19/04/2000 OS Grid Ref: SP2574682595

Rich hedge including hazel (Corylus avellana), privet, willow (Salix sp.), Pedunculate oak (Quercus robur), ash (Fraxinus excelsior), dog-rose (Rosa canina), hawthorn (Crataegus monogyna), elm and holly (Ilex aquifolium). The ground flora includes male-fern (Dryopteris filixmas), ivy (Hedera helix), dog's mercury (Mercurialis perennis), ground-ivy (Glechoma hederacea), hairy-brome (Bromopsis ramosa) with bush vetch (Vicia sepium), hedge woundwort (Stacys sylvatica), greaterstitchwort, false wood brome (Brachypodium sylvaticum), meadowsweet (Filipendula ulmaria), great willowherb (Epilobium hirsutum) and common nettle (Urtica dioica).

Target note 22 Survey Date: 19/04/2000 OS Grid Ref: SP2494382065

Neglected horse grazed grassland dominated by Yorkshire-fog (Holcus lanatus), Agrostiscapillaris, cock's-foot (Dactylis glomerata), timothy (Phleum pratense) with dock, common ragwort (Senecio jacobaea) red clover (Trifolium pratense), ribwort plantain (Plantago lancelota), creeping buttercup (Ranunculus repens) andsorrel. Changes noted on 12/09/2005 by KRM: Recently mown at time of vist.

Tetrad: SP28M

Target note 1 Survey Date: 28/09/1998 OS Grid Ref: SP2556784353

Field corner pond at the edge of a conifer plantation. Partly overhung by pedunculate oak (Quercus robur) and surrounded by semi-improved grassland and bramble scrub (Rubus fruticosus agg.). The pondcontains broad-leaved pondweed (Potamogeton natans) and Ceratophyllum demersum and is half covered by adiverse swamp community in which gypsywort (Lycopus europaeus), nodding bur-marigold and Glyceriafluitans are abundant with soft rush (Juncus effusus). J. articulatus, branched bur-reed (Sparganium erectum), yellow iris (Iris pseudacorus), marsh-marigold (Caltha palustris), common water-plantain (Alisma plantagoaquatica), lesser spearwort (Ranunculus flammula), greaterbird's-foot-trefoil, marsh bedstraw (Galium palustre) and occasional marsh violet. The surrounding grassland is species-rich with abundant common knapweed (Centaurea nigra), perforate St. John's-wort, betony, sneezewort (Achillea ptarmica), yarrow (Achillea millefolium), common bird's-foot-trefoil (Lotus corniculatus), tormentil (Potentilla erecta), lesserstitchwort, selfheal (Prunella vulgaris) meadow buttercup (Ranunculus acris) and ribwort plantain (Plantago lancelota). Grasses includeabundant Yorkshirefog (Holcus lanatus) with crested dog's-tail (Cynosurus cristatus), common bent (Agrostis capillaris), red fescue (Festuca rubra), sweet vernal-grass (Anthoxanthum odoratum), cock's-foot (Dactylis glomerata) and false oat-grass (Arrhenatherum elatius).

Target note 10 Survey Date: 28/09/1998 OS Grid Ref: SP2540784120

Larch plantation with occasional birch, pedunculate oak (Quercus robur) and holly over bracken (Pteridium aquilinum) and bramble (Rubus fruticosus agg.).

Target note 13 Survey Date: 28/09/1998 OS Grid Ref: SP2551384731

Road verge at the edge of Scots pine plantation. hazel (Corylus avellana), holly (Ilex aquifolium) elderover a diverse flora including dog's mercury (Mercurialis perennis), wood avens (Geum urbanum), herb-Robert (Geranium robertianum), red campion (Silene dioica), greater stichwort (Stellaria holostea), wood speedwell, wood melick (Melica uniflora), tufted hair-grass (Deschampsia cespitosa), creeping buttercup (Ranunculus repens), common dog violet and sweet woodruff (Galium odoratum).

Target note 14 Survey Date: 28/09/1998 OS Grid Ref: SP2567984539

silver birch (Betula pendula) and occasional rowan over coppice hazel (Corylus avellana) and elder (Sambucus nigra). the ground flora includes bracken (Pteridium aquilinum), broad bucklerfern (Dryopteris dilatata), D, affinis, D, filix-mas, abundant yellow archangel and wood sorrel, creeping-Jenny (Lysimachia nummularia) and bluebell (Hyacinthoides non-scripta).

Target note 15 Survey Date: 28/09/1998 OS Grid Ref: SP2581784726

Scots pine plantation with occasional silver birch (Betula pendula), pedunculate oak (Quercus robur) and canopy hollyover bracken (Pteridium aquilinum), bramble (Rubus fruticosus agg.), broad buckler-fern (Dryopteris dilatata), foxglove (Digitalis purpurea), creeping soft-grass (Holcus mollis) and occasional heath bedstraw (Galium saxatile).

Target note 16 Survey Date: 28/09/1998 OS Grid Ref: SP2585784525

Site of ponds, now dry, with birch, alder (Alnus glutinosa), pedunculate oak (Quercus robur) and hazel (Corylus avellana) and a groundflora dominated by bracken (Pteridium aquilinum) and bramble (Rubus fruticosus agg.) with broad buckler-fern (Dryopteris dilatata) and Holcusmollis.

Target note 17 Survey Date: 28/09/1998 OS Grid Ref: SP2555984574

Row of old coppice small-leaved lime on a bank at wood edge.

Target note 18 Survey Date: 28/09/1998 OS Grid Ref: SP2555684912

Unmanaged semi-improved grassland. Tussocky Yorkshire-fog (Holcus lanatus), cock's-foot (Dactylis glomerata), false oat-grass (Arrhenatherum elatius), red fescue (Festuca rubra) and common bent (Agrostis capillaris) withfrequent common knapweed (Centaurea nigra) and common sorrel (Rumex acetosa) Also present are bulbousbuttercup, lesser stitchwort (Stellaria graminea), hogweed (Heracleum sphondylium) and yarrow (Achillea millefolium).

Tetrad: SP28Q

Target note 3 Survey Date: 21/04/2015 OS Grid Ref: SP2633781436

996

Semi-natural woodland with a canopy of birch and ash (Fraxinus excelsior) with understory of bracken (Pteridium aquilinum) and bramble (Rubus fruticosus agg.) with occasional hazel (Corylus avellana) and elder (Sambucus nigra). Along the footpath species noted include Wood millet (Milium effusum), Bluebell (Hyacinthoides non-scripta), Enchanter's Nightshade (Circaea lutetiana), Wood-sorrel (Oxalis acetosella), Foxglove (Digitalis purpurea), Common Male-fern (Dryopteris filix-mas), Tufted Hair-grass (Deschampsia caespitosa) and Remote Sedge (Carex remota). The wood has had a considerable amount of timber removed although a good quantity of dead wood has been left.

UPDATED 21/04/2015 CFT

Millson's Wood LWS manged woodland - Meriden parish Council and SMBC. Woodland has invasive Spanish Bluebell (Hyacinthoides hispanica) hybridizing with native bluebell (Hyacinthoides non-scripta). Also problems with invasive variegated Yellow Archangel (Lamiastrum galeobdolon galeobdolon ssp arentatum) and Daffodils - garden escapes. Wood Avens (Geum urbanum) frequent throughout, Bugle (Ajuga reptans) and native Yellow Archangel (Lamiastrum galeobdolon) in southern sections away from houses. Otherwise well manged with areas of hazel coppice.

Target note 4 Survey Date: 21/04/2015 OS Grid Ref: SP2619481541

Noted 1996 Open areas of bracken (Pteridium aquilinum) and foxglove frequent and often quite extensive. Suggests that the area has been over managed and that bracken control should be considered to allow for a greater diversity to exist until the woodland starts to regenerate itself. Updated CFT 21/04/2015 Millson's Wood LWS managed woodland - Meriden Parish Council and SMBC

Target note 5 Survey Date: 21/04/2015 OS Grid Ref: SP2612381310

Noted 1996 Improved grassland containing a variety of grasses. Updated CFT 21/04/2015 field is now arable.

Target note 7 Survey Date: 21/04/2015 OS Grid Ref: SP2636681892

Noted 1996 Scattered conifer plantation in poor health. The grassland beneath is dominated by common bent (Agrostis capillaris) and red fescue (Festuca rubra), with locally abundant broadleaved dock (Rumex obtusifolius). Updated CFT 21/04/2015 appears to remain as described.

Target note 8 Survey Date: 21/04/2015 OS Grid Ref: SP2631981953

Noted 1996 Nursery/plantation dominated by mixed conifers of varied age. Updated CFT 21/04/2015 appears to be part of nursery.

Target note 9 Survey Date: 21/04/2015 OS Grid Ref: SP2618281959

1996

Conifer shelter belt with occasional mature pedunculate oak (Quercus robur) and ash (Fraxinus excelsior) standards with an understorey of occasional hazel (Corylus avellana).SP28R1. Dried up and silted pond shaded on the south and east sides by tall pedunculate oak (Quercus robur), hawthorn (Crataegus monogyna) and holly (Ilex aquifolium). The mud floor of the pond is now colonised by locally abundant marsh foxtail (Alopecurus geniculatus) with frequent celery-leaved buttercup (Ranunculus sceleratus), starwort spp. and occasionally marsh cudweed. On the shaded ground flora lies occasional common nettle (Urtica dioica), creeping buttercup (Ranunculus repens) and bittersweet (Solanum dulcamara). On higher ground, soft rush (Juncus effusus) dominates, grading into abundant common bent (Agrostis capillaris) and creeping bent (Agrostis stolonifera) on still higher ground.

UPDATED CFT 21/04/2015

Part of Hillcrest Nursery on Birmingham Road.

Target note 15 Survey Date: 21/04/2015 OS Grid Ref: SP2609981098

Noted 1996 Secondary woodland dominated throughout by birch. The ground flora is dominated by bracken with abundant bluebell (Hyacinthoides non-scripta) and occasionallycreeping softgrass (Holcus mollis) and foxglove (Digitalis purpurea). The wood is used for shooting andold pheasant pens were evident in the western section. It is bordered by tall hawthorn (Crataegus monogyna) and abundant Small-leaved Lime (Tilia cordata). Updated CFT 21/04/2015 Spring Wood LWS - Wood Millet (Milium effusum) and Wood-sorrel (Oxalis acetosella) also noted here.

Tetrad: sp28r

Target note 1 Survey Date: 27/06/2012 OS Grid Ref: SP2749583389

Dried up and silted pond shaded on the south and east sides by tall pedunculate oak (Quercus robur), hawthorn (Crataegus monogyna) and holly (Ilex aquifolium). The mud floor of the pond is now colonised by locally abundant marsh foxtail (Alopecurus geniculatus) with frequent celery-leaved buttercup, starwort spp. and occasionally marsh cudweed. Where the floor is shaded there are occasional common nettle (Urtica dioica), creeping buttercup (Ranunculus repens) andbitterswe. On higher ground soft rush (Juncus effusus) dominates, grading into abundant Agrostis capillaris and Agrostis stolonifera on still higher ground UPDATED 27/06/2012 OP. Pond not dried up, neighbouring green lane very damp.

Target note 2 Survey Date: 06/09/1996 OS Grid Ref: SP2714383109

Open copse at edge of arable field to which grazing stock have access. The canopy is dominated by scattered Pedunculate oak (Quercus robur) and ash standards with an understorey with frequent hawthorn (Crataegus monogyna), hazel (Corylus avellana) and elder as standards. There is noscrub layer. Typically the ground flora comprises scattered bracken (Pteridium aquilinum), creeping soft-grass (Holcus mollis), bluebell (Hyacinthoides non-scripta) and infrequently low bramble (Rubus fruticosus agg.).

Target note 3 Survey Date: 06/09/1996 OS Grid Ref: SP2709183872

Pond, shaded to the north by tall crack willow (Salix fragilis), pedunculate oak (Quercus robur), fieldmaple and holly (Ilex aquifolium) with water-lily frequent on the water surface. To the far north, muddy margins support locally abundant reed sweet-grass (Glyceria maxima). A grey heron and a number of moorhens (Gallinula chloropus) were noted.

Target note 5 Survey Date: 06/09/1996 OS Grid Ref: SP2650483461

Improved, rough grassland with abundant creeping thistle (Cirsium arvense) andbroad-leaved dock (Rumex obtusifolius). A front of Pteridium aquilinum is encroaching from the northern edgewhere the field abuts the woodland.

Target note 6 Survey Date: 06/09/1996 OS Grid Ref: SP2653783487

Ditch and bank, the banks on either side being hedged with tall holly (Ilex aquifolium). Inparts this has been laid though some years ago now.

Target note 7 Survey Date: 06/09/1996 OS Grid Ref: SP2653383272

Conifer plantation dominated by Japanese larch. The understorey is dominated by Pteridium aquilinum with frequent bluebell (Hyacinthoides non-scripta) and occasional low, scrambling bramble (Rubus fruticosus agg.).

Target note 8 Survey Date: 06/09/1996 OS Grid Ref: SP2656383399

Broad-leaved woodland edge dominated by birch with frequent rowan (Sorbus aucuparia) and occasional pedunculate pedunculate oak (Quercus robur). Pteridium aquilinum with frequent bramble scrub (Rubus fruticosus agg.)dominates the understorey. Milium effusum is occasional throughout this area.

Target note 9 Survey Date: 06/09/1996 OS Grid Ref: SP2626383272

Pteridium aquilinum dominated clearing through which tall, leggy rowan hasregenerated. The dense shade cast by the Pteridium aquilinum has allowed only avery few birch to regenerate.

Target note 10 Survey Date: 27/06/2012 OS Grid Ref: SP2627683021

Peastockings Meadow LWs comprises of un-improved, marshy, neutral hay meadow onslight slope to the north and east. Juncus acutiflorus is locally abundant overlarge areas as is Yorkshirefog (Holcus lanatus). Anthoxanthum odoratum is frequent andtufted hair-grass (Deschampsia cespitosa) is frequent to occasional. Occasional frequency grassesare common bent (Agrostis capillaris), cock's-foot (Dactylis glomerata) and Holcus mollis with raremeadow fox-tail (Alopecurus pratensis), crested dog's-tail (Cynosurus cristatus), rough meadow-grass (Poa trivialis) and floating sweet-grass (Glyceria fluitans). Sedges include occasional Carex hirta with rare glaucous sedge (Carex flacca) and oval sedge (Creax ovalis). Rushes include occasional compact rush (Juncus conglomeratus) and rare soft rush (Juncus effusus). The sward is herb rich with an abundance of species indicitive of unimprovedgrassland. Betony, common knapweed (Centaurea nigra), bird's foot-trefoil, tormentil (Potentilla erecta) and creepingcinquifoil are abundant to frequent in the dryer areas. Greater bird's-foottrefoil is abundant to frequent in the wetter areas, here meadowsweet (Filipendula ulmaria)islocally abundant over small areas. Devil'sbit scabious, great burnet and ribwort plantain are frequent to occasional. Occasional frequency herbs aremarsh thistle (Cirsium palustre), marsh bedstraw (Galium palustre), selfheal (Prunella vulgaris) lesser spearwort (Ranunculus flammula), creeping buttercup (Ranunculus repens), lesser stitchwort (Stellaria graminea), zigzag clover (Trifolium medium) and white clover (Trifolium repens). Rare frequency herbs are sneezewort (Achillea ptarmica), agrimony (Agrimonia eupatoria), wild angelica (Angelica sylvestris), lady's bedstraw (Galium verum), perforate st johns wort, meadow vetchling (Lathyrus pratensis), creeping-Jenny (Lysimachia nummularia), dyers greenweed, bugle (Ajuga reptans), field horsetail (Equisetum arvense), corn mint, common sorrel (Rumex acetosa) and ragwort. There are a few isolated bushes ofhawthorn (Crataegus monogyna) and grey willow within the field. Meadow brown (Maniola jurtina), large white andringlet are abundant with small small tortoiseshell (Aglais urticae), six-spot burnet and gatekeeperalso seen. Grasshoppers are also abundant. UPDATED 27/06/2012 OP. Meadow not in good condition, grassland rank in places and unmanaged. Species observed at time of visit, great burnet (Sanguisorba officinalis), meadowsweet (Filipendula ulmaria), common knapweed, tormentil (Potentilla erecta), betony, ragged-robin (Lychnis flos-cuculi), agrimony and a large patch (20-30 spikes) of heath spotted orchids at the east of the meadow at woodland edge.

Target note 11 Survey Date: 06/09/1996 OS Grid Ref: SP2643683096

Former pond, now dried up and supporting abundant floating sweet-grass (Glyceria fluitans). Alarge willow has fallen across the pond and has rooted from its trunk, contributing to the dry conditions. On higher, dryer ground tufted hair-grass (Deschampsia cespitosa) and soft rush (Juncus effusus) are frequent.

Target note 12 Survey Date: 06/09/1996 OS Grid Ref: SP2624382897

Peastockings Meadow SINC. Small area of broad-leaved semi-naturalwoodland. English oak standards are frequent with occasional ash (Fraxinus excelsior) andbirch. Theshrub layer consists of frequent to occasional hawthorn (Crataegus monogyna), elder (Sambucus nigra) and holly withrare hazel (Corylus avellana). The ground layer is sparse in areas with locally abundant patchesof common nettle (Urtica dioica), enchanter's-nightshade and dog's mercury (Mercurialis perennis). Occasional in the groundlayer are brambles (Rubus fruticosus agg.) and creeping buttercup (Ranunculus repens) with rare honeysuckle (Lonicera periclymenum), violets, lord's-and-ladies (Arum maculatum), greater stichwort (Stellaria holostea), wood speedwell, broad buckler-fern (Dryopteris dilatata), male-fern (Dryopteris filix-mas), hogweed (Heracleum sphondylium), herb-Robert (Geranium robertianum), wood dock (Rumex sanguineus) and red campion (Silene dioica).

Target note 13 Survey Date: 06/09/1996 OS Grid Ref: SP2629483445

Recently clear felled birch woodland. Occasional across the area aretall, leggy rowan (Sorbus aucuparia) and birch which have been left standing. The open lightconditions have allowed Pteridium aquilinum to become the dominant ground cover.Low scrambling bramble is frequent where the ground has not yet been colonised Pteridium aquilinum. Occasional in these parts are annual meadow-grass (Poa annua), honeysuckle (Lonicera periclymenum), foxglove (Digitalis purpurea) and bluebell (Hyacinthoides non-scripta). A number of the stumps show signs of regeneration.

Target note 14 Survey Date: 06/09/1996 OS Grid Ref: SP2611383196

Ride of hard standing. A 1m wide strip of vegetation runs along eitherside of the ride. These support a variety of flora, including frequent rosebay willowherb (Chamerion angustifolium), creeping buttercup (Ranunculus repens), self-heal, water pepper, marsh cudweed (Gnaphalium uliginosum), creeping-Jenny (Lysimachia nummularia) and wood sage (Teucrium scorodonia).

Target note 15 Survey Date: 06/09/1996 OS Grid Ref: SP2673982809

Narrow (2-3m wide) strip of marshy grassland, dominated by soft rush (Juncus effusus), running along the west side of a large pond. hawthorn (Crataegus monogyna) and elder scrubare occasional along its length. The pond supports no submerged or emergentyegetation.

Target note 16 Survey Date: 06/09/1996 OS Grid Ref: SP2657682411

Ridge and furrow evident, though grassland improved as a result of heavygrazing.

Target note 17 Survey Date: 06/09/1996 OS Grid Ref: SP2653082626

Ridge and furrow evident, though grassland improved as a result of heavygrazing.

Target note 19 Survey Date: 06/09/1996 OS Grid Ref: SP2607483050

Conifer plantation edged by 20-30 year old red pedunculate oak (Quercus robur).

Target note 20 Survey Date: 27/06/2012 OS Grid Ref: SP2618982968

Peastockings Meadow SINC. Horse grazed semi-improved neutral grassland. Difficult to assess due to level of grazing the following is therefore probablyan underestimation of the fields value. The following grasses were recorded, not in order of abundance: common bent (Agrostis capillaris), sweet vernal-grass (Anthoxanthum odoratum), Yorkshire-fog (Holcus lanatus), perennial rye-grass (Lolium perenne), timothy (Phleum pratense) and smooth meadow-grass (Poa pratensis). Carex hirta islocally frequent. Creeping buttercup is locally abundant with locally frequentbird's- foot trefoil and Devil's-bit scabious in small areas only. Occasionalfrequency herbs are yarrow (Achillea millefolium), common mouse-ear (Cerastium fontanum), ribwort plantain (Plantago lancelota), tormentil (Potentilla erecta), lesser stitchwort (Stellaria graminea) and white clover (Trifolium repens). Rare frequency herbs are harebell, creeping thistle (Cirsium arvense), marsh thistle (Cirsium palustre), spear thistle (Cirsium vulgare), autumn hawkbit (Leontodon autumnalis), greater plantain, selfheal (Prunella vulgaris) meadow buttercup (Ranunculus acris)common sorrel (Rumex acetosa), broad-leaved dock (Rumex obtusifolius), common ragwort (Senecio jacobaea) betony, red clover (Trifolium pratense), nettle (Urica dioica) and germander speedwell (Veronica chamaedrys). Comma and meadow brown butterfliesseen. UPDATED 27/06/2012 OP. Not horse grazed at time of visit, but is rabbit grazed. Fences are derelict and contains abandoned horse jumping equipment. As described, with common bird's-foot-trefoil (Lotus corniculatus) and creeping buttercup still abundant. Many listed species not apparent. Confirmed germander speedwell (Veronica chamaedrys) and tormentil (Potentilla erecta).

Target note 21 Survey Date: 06/09/1996 OS Grid Ref: SP2641183037

Peastockings Meadow SINC. Small area of recent secondary woodland orperhaps plantation. Stand is young and consists of english Pedunculate oak (Quercus robur), birch, apple, hawthorn (Crataegus monogyna), elder (Sambucus nigra) and poplar. The ground layer is poor with creeping soft-grass (Holcus mollis), bramble (Rubus fruticosus agg.), bugle (Ajuga reptans), bluebell (Hyacinthoides non-scripta), foxglove (Digitalis purpurea), herb-Robert (Geranium robertianum), devil's-bit scabious, tormentil (Potentilla erecta), tufted hair-grass (Deschampsia cespitosa), enchanter's-nightshade (Circaea lutetiana) and common nettle (Urtica dioica).

Target note 23 Survey Date: 27/06/2012 OS Grid Ref: SP2747583574

species-rich hedgerow with downy birch (Betula pubescens), hazel (Corylus avellana), holly (Ilex aquifolium), elder (Sambucus nigra), dog-rose (Rosa canina), hawthorn (Crataegus monogyna) and rowan (Sorbus aucuparia). Very tall.

Target note 24 Survey Date: 27/06/2012 OS Grid Ref: SP2636382628

Veteran oak, approx 6m gbh.

Target note 25 Survey Date: 27/06/2012 OS Grid Ref: SP2672783274

Green lane with species-rich hedgerows on both sides containing holly (Ilex aquifolium), field maple (Acer campestre), elder (Sambucus nigra), hazel (Corylus avellana) and hawthorn (Crataegus monogyna).

Tetrad: SP28S

Target note 22 Survey Date: 28/07/2014 OS Grid Ref: SP2625684447

Noted 1996 Plantation of dense Scots pine (Pinus sylvestris), actively managed. Updated CFT 28/07/2014 Meighs Wood no public access now a mature Scots Pine (Pinus sylvestris) woodland plantation

Target note 25 Survey Date: 10/09/1996 OS Grid Ref: SP2667784118

Open pool in a field of mostly species poor semi-improved grassland. Around pool edge is Unbranched Bur-reed (Sparganium emersum), Soft Rush (Juncus effusus), Compact Rush (Juncus conglomeratus) and Hard Rush (Juncus inflexus), Marsh Foxtail (Alopecurus geniculatus), Creeping Bent (Agrostis stolonifera), American willowherb (Epilobium ciliatum) and Flowering Rush (Butomus umbellatus). There are also a number of other ponds in the vicintiy.

Copyright: Habitat Biodiversity Audit Partnership (HBA) for Warwickshire, Coventry and Solihull 2015. Ecological Services Warwickshire County Council PO Box 43 CV34 4SX Tel: 01926 412197. While every effort has been made to ensure that the data is accurate in accordance with Phase 1 habitat standards the project cannot gurantee its accuracy or accept responsibility for any changes to land use or habitat that may have occurred since the survey was undertaken

Warwickshire Geological Conservation Group

Warwickshire Local Geological Site					
Site No: 70	Meriden Hill Cutting				
Geological Formations	Salop Formation – Allesley Member (Carboniferous)				
Criteria Form		p 2			
Description		p 3			
Photographs		p 4			
Location Map		p 5			

Local Geological Sites (LoGS), designated by locally developed criteria, are currently the most important places for geology and geomorphology outside statutorily protected land such as Sites of Special Scientific Interest (SSSI). The designation of LoGS is one way of recognising and protecting important Earth science and landscape features for future generations to enjoy.

WGCG is responsible for the identification of LoGS in Warwickshire and the West Midlands.

Please note that designation of a site as a LoGS does not confer a legal right of access. Unless the site is on a designated public right-of-way, the landowner's permission is required before visiting.

Warwickshire Local Geological Site - Criteria Form							
Site name: Meriden Hill Cutting		Also known as:					
District: Solihull		County: Solihull	lihull				
Grid reference: SP 2535 8198 - 2560 8196		LoGS Number: 70		ESCC Class:	ER		
Brief Description: Good exposures of Upper Carboniferous Salop Formation, Allesley Member sandstone.							
This site qualifies as a Local Geological Site for the following criteria:							
A Good Example of exposures of Salop Formation, Allesley Member sandstone.							
Educational Fieldwork							
1. Educational Potential	✓	2. Physical access	✓	3. Safety		✓	
Scientific Study							
Diversity of interest		2. Rarity of interest		3. Size of featur	e	✓	
4. Typicalness of feature	✓	5. Geological/physio	ographic linkage to:				
Historical Value							
1. Celebrity link		2. Pioneering research		3. Historical lin	ık		
Aesthetic Value In The Landsca	pe						
1. Local importance in the landscape		2. Promotion of Earth science					
Signed			Date f	irst selected 13t	h March 2	2002	
lan Temrik			Reviewed by LoGS panel Oct. 2009				
			Further survey required				
I M Fenwick, Chairman, Warwickshire Geological Conservation Group			LoGS Confirmed			✓	
Endorsed by							
Warwickshire Museum Natural England							
J Radley, Keeper of Geology J A Irving, Conservation Adviser							
In the event of any development or planning consultation relating to this site or its surrounds please inform: The LoGS Officer WGCG, c/o Keeper of Geology, Warwickshire Museum, Market Place, Warwick CV34 4SA (tel: 01926-418182)							

WARWICKSHIRE GEOLOGICAL CONSERVATION GROUP LOCAL GEOLOGICAL SITE (LoGS)

Site	70	Meriden Hill Cutting		
Parish		Meriden		
District		Solihull		
County		Warwickshire		
National Grid Reference		SP 2535 8198 - 2560 8196		
Ordnance Survey Sheets 1:50000		140		
_	1:10000	SP 28 SE		

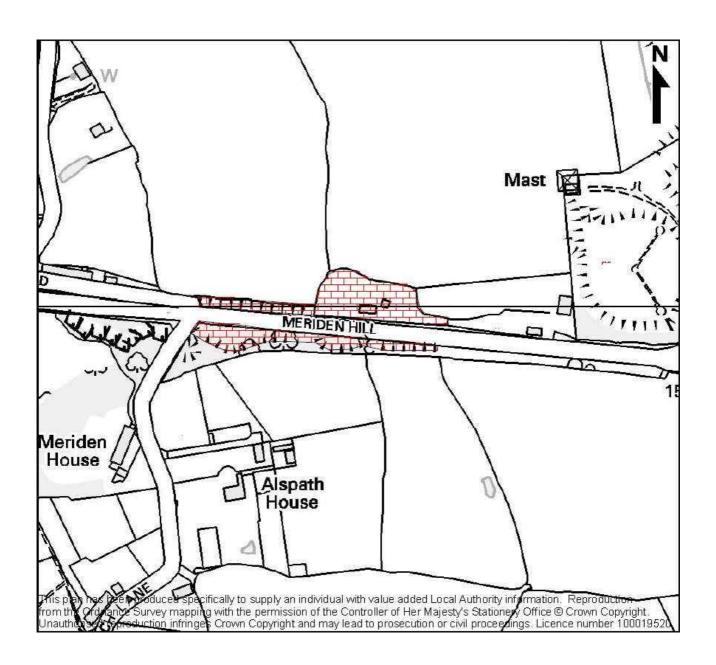
Location

The site includes the exposures on both sides of the Birmingham Road, known as Meriden Hill, from the junction of Church Lane eastwards for a distance of 250m.

Summary of Interest

Exposures up to 7m high on the north and south sides of the road, showing coarse sandstone belonging to the Allesley Member of the Upper Carboniferous Salop Formation.





(Refer to guidelines for completion)

	(===) =	(rejer to guitaetines jer comprenent)				
Site Name:	Site Ref:	Grid Ref:				
Crow Wood	SP28 K5	SP 255812				
Local Authority Area:		Date Selected:				
Solihull Metropolitan Borough Council		26/03/2001				

Site description: Area: 3.34ha

Crow Wood is a small 3.34ha area of native woodland situated on Moat House Farm 1.5km south east of the village of Meriden. It is part of a small complex of three native woodlands including Spring Wood SINC and Millisons Wood LNR both of which are within 1km to the east. The boundary of Crow Wood has changed little since the first edition OS Map, although this shows the woodland has extended around the ponds in the north east which were previously in the neighbouring field.

The vegetation appears to be a modified version of W10 *Quercus robur-Pteridium aquilinum-Rubus fruticosus* woodland. Throughout the majority of the wood the stand is dominated by young Birch (*Betula*) trees probably less than 30 years old. The understorey is generally absent with occasional Hazel (*Corylus avellana*). The periphery of the wood is richer in woody species, here Hazel increases in frequency, Rowan (*Sorbus aucuparia*) is frequent, English Oak (*Quercus robur*) is occasional whilst Aspen (*Populus tremula*) and Crab Apple (*Malus sylvestris*) are rare. The boundary hedge is particularly interesting and includes two areas where Small-leaved Lime (*Tilia cordata*) has been layered. This has formed short stretches of the hedge were it dominates. The resulting stools have not been cut recently and have developed into mature, multi-stemmed specimens. An excellent example of a veteran English Oak tree is also present, it's trunk is heavily burred with a large hollow cavity that contains abundant dead wood.

The ground layer of the wood is dominated by W10 constants: Bracken (*Pteridium aquilinum*) is abundant and Bramble (*Rubus fruticosus*) is locally abundant. Male-fern (*Dryopteris filix-mas*) and Broad Buckler-fern (*Dryopteris dilatata*) are occasional whilst Foxglove (*Digitalis purpurea*) is rare. A previous survey at a more appropriate time of year (2/9/98) indicates that Bluebells (*Hyacinthoides non-scripta*) and Yorkshire Fog (*Holcus lanatus*) are also abundant.

A shaded ride with an east-west aspect runs through the south of the wood. Here Yellow Pimpernel (*Lysimachia nemorum*) and Common Chickweed (*Stellaria media*) are present. The ride runs through a small clearing dominated by Bracken.

There are also 5 shaded ponds situated on the northern and western corners of the wood. In the north these ponds are shaded by Ash (*Fraxinus excelsior*), Aspen and Willow (*Salix*). Elder (*Sambucus nigra*) is abundant in the shrub layer and Yellow Archangel (*Lamiastrum galeobdolon*) is abundant on the banks. One of the ponds has developed a small area of S12 *Typha latifolia* swamp. This area contains some Water Plantain (*Alisma plantago-aquatica*), Reed Canary Grass (*Phalaris arundinacea*) and Marsh Thistle (*Cirsium palustre*). The other ponds are more shaded and contain a lot of Duckweed (*Lemna*) with some peripheral Remote Sedge (*Carex remota*).

The following additional species were recorded in a previous phase II survey (5/5/82): Moschatel (*Adoxa moschatellina*), Red Campion (*Silene dioica*) and Lesser Celandine (*Ranunculus ficaria*).

Phase 1 Habitats present:

Broad-leaved semi-natural woodland Standing water Swamp

Evaluation ag Habitat criter					& Scrı	ıb						
SCIENTIFIC	Elen	nents o	of the	criteri	a appl	ying	COMMUNITY	Elements of the criteria				
CRITERIA	to th	e site					CRITERIA	apply	ying t	o the s	ite	
	1	2	3	4	5	6		1	2	3	4	5
Diversity	√	√	√	✓	SR		Physical & Visual Access					
Rarity	√						Educational Value					
Size	√						Community & Amenity Value					
Naturalness	√	√	√	√	√		Aesthetic Appeal & Landscape	✓	√	✓	√	
Fragility							Geographical Position					
Typicalness			√				Recorded History					
Ecological Position	√						Continuity of Landuse	√		✓		
Significant Populations												
Potential Value	√											

Crow Wood qualifies for 14 scientific and 6 community criteria. The most important attributes of the site are its diversity, naturalness, antiquity and ecological position.

The site is diverse in terms of habitats with high forest Birch wood, ponds, swamp and a veteran tree. There is a reasonable diversity of plant species denoting a relatively natural example of W10 vegetation with several ancient woodland indicators recorded: Moschatel, Remote Sedge, Yellow Archangel, Crab Apple, Small-leaved Lime and Yellow Pimpernel.

The wood generally lacks mature timber but contains significant amounts of fallen dead Birch stems. The stand appears to have resulted from natural regeneration with little if any planting and an absence of introduced trees. Some Rhododendron has been planted but has not yet spread.

The wood is of a fair size (3.5ha). It contains an excellent example of a veteran tree which is at least locally significant. Evidence of historic, traditional management is present in the boundary hedge with rows of layered Small-leaved Lime stools which are now over mature.

Potentially the naturalness of the wood could be increased by allowing the stand to mature and increasing the density of English Oak standards which would naturally dominate in mature stands in this type of woodland.

The site is also valuable as a feature of the landscape. W10 woodland is characteristic of the Arden.

Sources of Information:	Recorder Site No:	Ecosite No:

WSP,WBRC,HB	A	NA		24/28	/28					
Survey Details:										
Date:	Survey Type:		Surveyors:		Location of records					
17/01/01	Phase II		Jeff Waddell		Wildlife Sites Project					
02/09/98	Phase I		Ian Tanner		Habitat Biodiversity Audit					
05/05/82	Phase II		SP/RS		Warwickshire Biological Records Centre					
Any Other Information: Previously notified as a West Midlands SINC on 12/11/75 and renotified in the review of January 1998. This review includes a small addition to the North East of the wood to include an area of woodland and ponds.										
Completed By: Je Date: 22/01/01	eff Waddell		Map attached: Y	Yes Specie	es list attached: Plant					
Passed by Sites S Signed:	election Panel:		Further survey required: (circle as appropriate) Date:							

(Refer to guidelines for completion)

		(Rejer to Suitactifies joi completion)
Site Name:	Site Ref:	Grid Ref:
Eaves Green Hedgerow	SP28L2	SP256 826
Local Authority Area:		Date Selected:
Solihull Metropolitan Borough Council		

Site description: Length: m

The SINC is part of Eaves Green Lane, a narrow country lane, that is part of the Heart of England Way, and is located approximately 1.5 kilometres to the east of the village of Meriden. The SINC extends from the A45 road bridge to the junction with Lodge Green Lane. From the road bridge, the lane rises gently, enclosed within steep roadside banks with gappy hedgerows, and many mature overhanging trees. Further east, as the road gradient levels, the hedges are very variable in structure and species composition, with the hedge on the north side of the carriageway, mostly tall, and unmanaged, whilst to the south the hedge includes long sections that have been laid in the recent past. Both hedges contain many standard trees. The grass verges are generally narrow, and species poor.

North of the carriageway

The hedgerow is variable both in structure and species composition, but is mostly tall, unmanaged, with many standards. Trees and shrub species include; frequent/locally abundant Hazel (Corylus avellana), Holly (Ilex aquifolium), Field Maple (Acer campestre), occasional/locally frequent Hawthorn (Crataegus monogyna), Oak (Quercus robur), occasional Ash (Fraxinus excelsior), rare/locally frequent Poplar sp, rare Wild Privet (Ligustrum vulgare), Sycamore (Acer pseudoplatanus), and Dog Rose (Rosa canina). Ground flora species found at the base of the hedge include; occasional Greater Stitchwort (Stellaria holostea), Dog's Mercury (Mercurialis perennis), Red Campion (Silene dioica), with rare Male Fern (Dryopteris filix-mas), False Brome (Brachypodium sylvaticum), Ivy (Hedera helix), Ground Ivy (Glechoma hederacea), Common Nettle (Urtica dioica), Bittersweet (Solanum dulcamara), Herb Robert (Geranium robertianum), and Bramble (Rubus fruticosus agg.). The grass verge is species poor with Perennial Rye-grass (Lolium perenne), False Oat-grass (Arrhenatherum elatius), Annual Meadow-grass (Poa annua), Ribwort Plantain (Plantago lanceolata), Greater Plantain (Plantago major), Cow Parsley (Anthriscus sylvestris), Dandelion (Taraxacum officinale), Meadow Vetchling (Lathyrus pratensis), Broad-leaved Dock (Rumex obtusifolius), and Hogweed (Heracleum sphondylium).

South of the carriageway

The hedgerow to the south of the carriageway, is again quite variable, but with the exception of the most western part, which is tall, and very gappy, is mostly intact and has largely been laid in the recent past. Tree and shrub species recorded include; frequent/locally abundant Hazel, frequent Holly, Field Maple, Hawthorn, occasional/locally frequent Ash, English Elm (*Ulmus procera*), occasional Blackthorn (*Prunus spinosa*), Oak, Elder (*Sambucus nigra*), Dog Rose, rare/locally frequent Grey Willow (*Salix cinerea*), and rare Rowan (*Sorbus aucuparia*). Among the ground flora there is occasional/locally frequent Male Fern, occasional Dog's Mercury, Red Campion, and Greater Stitchwort. Other herb species generally only recorded at rare to very occasional frequency include; Bush Vetch (*Viccia sepium*), Hairy Brome (*Bromus ramosus*), Lords and Ladies (*Arum maculatum*), Broad Buckler-fern (*Dryopteris dilatata*), Foxglove (*Digitalis purpurea*), Hedge Woundwort (*Stachys sylvatica*), Common Nettle, Ivy, Ground Ivy, Wood Avens (*Geum urbanum*), Herb Robert, Bramble, and Rough Meadow-grass (*Poa trivialis*).

The grass verge is mostly narrow, but does widen in short sections. It is species poor and includes Cock's-foot, Annual Meadow-grass, Perennial Rye-grass, Greater Plantain, Silverweed (*Potentilla anserina*), White Clover (*Trifolium repens*), Dandelion, Germander Speedwell (*Veronica chamaedrys*), Creeping Buttercup (*Ranunculus repens*), Cow Parsley, and Hogweed. A deep wet ditch, which runs along a long part of the eastern half of the verge, contains Bittersweet, Great Willowherb (*Epilobium hirsutum*), Meadowsweet (*Filipendula ulmaria*), Redshank (*Polygonum maculosa*), and Rosebay Willowherb (*Chamerion angustifolium*).

Phase 1 Habitats present: Hedgerows, Semi-natural grassland, Running water.

$\label{eq:example_expectation} Evaluation \ against \ the \ criteria$

Habitat criteria applied: Hedgerows

SCIENTIFIC	Elen	nents o	of the	criteri	a appl	ying						a
CRITERIA	to th	e site					CRITERIA	applying to the site				
	1	2	3	4	5	6		1	2	3	4	5
Diversity	>	>		>			Physical & Visual Access	>		>		
Rarity	~						Educational Value					
Size							Community & Amenity Value		>			
Naturalness		Y		>			Aesthetic Appeal & Landscape		>	Y		
Fragility	>						Geographical Position		Y			
Typicalness	>						Recorded History					
Ecological Position							Continuity of Landuse	>				
Significant Populations												
Potential Value	~											

n a diverse range of tree and shr , associated with woodland inclu	ub species, and also suppor uding Dog's Mercury, Grea	ts a diverse list of atter Stitchwort, Male
ation: Recorder Site N	o: Ecosite N	Vo:
Survey Type:	Surveyors:	Location of records
Phase II	D. Cole	Wildlife Sites Proj.
Phase I	I. Tanner	НВА
/9/04 Phase II D. Cole Wildlife Sites Proj.		
avid Cole	Map attached: Spec	ies list attached:
	· -	opropriate)
	n a diverse range of tree and shr, associated with woodland includer Fern, and Hedge Woundwork nation: Recorder Site N Survey Type: Phase II Phase I ation: avid Cole election Panel: Yes / No / Fur	n a diverse range of tree and shrub species, and also support, associated with woodland including Dog's Mercury, Greater Fern, and Hedge Woundwort. Associated features included in the species of the sp

(Refer to guidelines for completion)

	()	(1tejer to guitaretines jor comprettori)				
Site Name:	Site Ref:	Grid Ref:				
Millisons Wood LNR	SP28 Q6	SP262814				
Local Authority Area:		Date Selected:				
Solihull Metropolitan Borough Council		26/03/2001				

Site description: Area: 11.36ha

Millisons Wood is situated 2km east of Meriden on the southern edge of the village of Millisons Wood. It is part of a small complex of three ancient woodlands which also includes Crow Wood SINC 3/4 km to the west and Spring Wood SINC 1/4 km to the south west. The surrounding land use is Arable to the east; improved grassland to the west and housing to the north. Since the first edition OS Map the wood has decreased by about a third. A contiguous area to the north of the present wood which was previously wooded is now occupied by the village of Millisons Wood. The vegetation of Milisons Wood is W10 *Quercus robur-Pteridium aquilinum-Rubus fruticosus* woodland. The wood has been designated and managed as an LNR by Solihull Metropolitan Borough Council since March 1993.

Much of the north and east of the wood is actively managed coppice with standards. Here the stand is open, presumably because of selective felling and consists of frequent Birch (*Betula*) standards with rarer Rowan (*Sorbus aucuparia*), English Oak (*Quercus robur*) and Aspen (*Populus tremula*). Ash (*Fraxinus excelsior*) is locally abundant to frequent in the north east of the wood. Holly (*Ilex aquifolium*) is locally frequent and as it hasn't been coppiced is breaking through to the canopy. Recently coppiced Hazel (*Corylus avellana*) stools are dominant in the coppice shrub layer which also includes some Aspen suckers. Honeysuckle (*Lonicera periclymenum*) is occasional and Yellow Archangel (*Lamiastrum galeobdolon*) is abundant in small areas. Wood Sedge (*Carex sylvatica*) and Remote Sedge (*Carex remota*) were recorded adjacent to the main ride.

The southern and western part of the wood is not currently coppiced. It has a denser canopy of abundant Birch with an understorey of occasional Hazel. Small clearings are present dominated by Creeping Soft Grass (*Holcus mollis*), Bramble (*Rubus fruticosus*) and Bracken (*Pteridium aquilinum*). A dried spike of what is thought to be Broad-leaved Helleborine (*Epipactis helleborine*) was found on the southern boundary Bank. A specimen has been deposited in the Warwickshire Museum Herbarium. This species has been recorded previously (Adrian Smith 17/9/96).

The wood has been well recorded. Other woodland plants found by other recorders include: Garlic Mustard (*Alliaria petiolata*), Wood Anemone (*Anemone nemorosa*), Wood Forget-me-not (*Myosotis sylvatica*), Common Figwort (*Scrophularia nodosa*), Raspberry (*Rubus idaeus*) and Guelder Rose (*Viburnum opulus*) from RS/SP 6/5/82. Wood Millet (*Milium effusum*), Enchanter's-nightshade (*Circaea lutetiana*), Bluebells (*Hyacinthoides non-scripta*) and Wood Sorrel (*Oxalis acetosella*) from Maree Whyte, Reg Elliot 16/8/96. Greater Stitchwort (*Stellaria holostea*), Yellow Pimpernel (*Lysimachia nemorum*), Alder Buckthorn (*Frangula alnus*), Herb Robert (*Geranium robertianum*) and Solomon's Seal (*Polygonatum multiflorum*) from Adrian Smith 1995-1996. The *Lepidoptera* and Birds of the wood have also been recorded by a local naturalist from the village. A good range of woodland *Lepidoptera* have been recorded recently including: Brimstone (*Gonepteryx rhamni*), Orange Tip (*Anthocharis cardamines*), Holly Blue (*Celastrina argiolus*), Purple Hairstreak (*Neozephyrus quercus*), White-letter Hairstreak (*Satyrium w-album*) and Speckled Wood (*Pararge aegeria*).

Millisons Wood also has a good diversity of woodland bird species some of which will have benefited from the dense coppiced shrub layer. Amongst the more interesting species recorded are: Garden Warbler (Sylvia borin), Willow Warbler (Phylloscopus trochilus), Black cap (Sylvia atricapilla), Chiffchaff (Phylloscopus Collybita), White Throat (Sylvia communis), Dunock (Prunella modularis), Redwing (Turdus iliacus), Goldcrest (Regulus regulus), Spotted Flycatcher (Muscicapa striata), Nuthatch (Sitta europaea), Treecreeper (Certhia familiaris), Song Thrush (Turdus philomelos), Bullfinch (Pyrrhula pyrrhula) and Jay (Garrulus glandarius). The history of the wood has been researched by an undergraduate of the University of Plymouth in the report "Aspects of the Ecological History of Millisons Wood, West Midlands". This report proves the wood has existed for the last 400 years as it is mentioned directly in a document dated 1597. A further document from the 13th-14th century mentions a "common wood" near to a ford "Kingsweysforde" which was known to cross the Coventry to Meriden road. The common wood may refer to Millisons Wood although this is not proven. Several documents were also found that indicate that the wood was managed as coppice with standards. The earliest of these dates from 1634, the latest from 1816. Most of these records refer to the area coppiced which appeared to be a third of the wood. Wood banks, ditches and a small area of ridge and furrow add to the archaeological interest of the site. Some of the wood banks are inverted, ie of opposite orientation, sloping towards the wood. This suggests animals were intentionally retained in the wood at one point. These may have been Pigs for Autumn pannage or Deer.

Phase 1 Habitats present:

Broad-leaved semi-natural woodland Bracken Tall herb

Evaluation ag Habitat criter	-				and Sc	crub						
SCIENTIFIC		nents o	of the	criteri	a appl	ying	COMMUNITY Elements of the criteria				a	
CRITERIA	to th	e site					CRITERIA	appl	ying t	o the s	ite	
	1	2	3	4	5	6		1	2	3	4	5
Diversity	3	3	3	3	3		Physical & Visual Access	3	3			
Rarity	3						Educational Value					3
Size	3						Community & Amenity Value	3	3	3		
Naturalness	3	3	3	3	3	3	Aesthetic Appeal & Landscape	3	3	3	3	
Fragility	3						Geographical Position		3			
Typicalness	3	3	3				Recorded History	3	3	3		
Ecological Position	3						Continuity of Landuse	3	3	3		
Significant Populations												
Potential Value	3											

Millisons Wood scores highly qualifying for 19 scientific and 17 community criteria. Notably the site qualifies for all the criteria within the diversity, naturalness, typicalness, community and amenity value, aesthetic appeal and landscape value, recorded history and continuity of landuse criteria sets.

The wood is an ancient, native woodland with natural W10 vegetation many ancient woodland indicator species have been recorded including: Guelder Rose, Wood Millet, Wood Anemone, Remote Sedge, Wood Sedge, Enchanter's-nightshade, Yellow Archangel, Wood Sorrel and Broadleaved Helleborine. The site contains a range of sub habitats including open clearings, high forest, coppice with standards and rides. A good range of woodland *Lepidoptera* and Birds have been recorded including the Regional Action Plan *Lepidoptera*: White-letter Hairstreak, Purple Hairstreak and the UK priority species Song Thrush.

Millisons wood contains the locally rare species Broad-leaved Helleborine. In Warwickshire this is an occasional plant of a few widely scattered localities. Ancient native woodland is a locally important habitat. The size of the wood is quite large at 11.36ha.

In terms of naturalness the site is composed of predominantly native vegetation subject to coppice management. There are significant amounts of dead wood especially Birch. The wood has not been planted and invasive species are not a problem.

The survival of the coppice structure, associated sub habitats and species depends on continued sensitive management.

Millisons wood is a good example of a managed coppice with standards woodland and as such practices have declined makes a valuable contribution to the range of woodland types in Warwickshire.

Its ecological position is important as part of a small collection of native woodland which includes two other SINCs. Potentially the value of the wood could be increased by a transition from Birch to Oak and Ash standards, if possible through natural regeneration.

Millisons Wood also meets many community criteria. The site is publicly owned. Access and community involvement in its management are encouraged by an LNR designation. The site contains specific interest to local naturalists in terms of Plants, Butterflies and Birds. It is also a valuable aesthetic resource. The geographical position of the site adjacent to the village of Millisons Wood increases its accessibility. The recorded history of the wood has been well researched and documented in a report "Aspects of the Ecological History of Millisons Wood, West Midlands". The wood is known to be long established. Documentary evidence from 1597 mentions the wood by name and an older document from the 13th-14th century mentions a wood that is possibly Millisons Wood.

Sources of Inform WSP, HBA, WBI	rces of Information : P, HBA, WBRC		lo:	Ecosite No: 16/28			
Survey Details:							
Date:	Survey Type:		Surveyors:		Location of records		
17/01/01	Phase II		Jeff Waddell		Wildlife Sites Project		
16/08/96	Phase I		Maree Whyte & Elliot	z Reg	Habitat Biodiversity		
06/05/82	Phase II		RS/SP		Audit Warwickshire Biological Records Centre		
1995-1996	Various speci (Plant, Butter				Solihull Metropolitan Borough Council		

Any Other Information:

First designated as a West Midlands SINC on 12/11/75. Reselected in the review of January 1989. Also designated as a LNR by SMBC and EN on march 1993.

An area of ancient native woodland still exists in the neighbouring housing estate which was previously connected and part of Millisons Wood. Access has not been secured to this area yet but it remains on the Alert Map and should be assessed if access becomes available.

Completed By: Jeff Waddell Map attached: Yes

Date: 30/01/01 Species list attached: Plant, Bird, Butterfly

Passed by Sites Selection Panel: Yes / No / Further survey required: (circle as

candidate Wildlife Site appropriate)

Signed: Date:

(Refer to guidelines for completion)

	(1teje	to guidenites for completion,
Site Name:	Site Ref:	Grid Ref:
Peastockings	SP28 R3	SP 263829
Local Authority Area:		Date Selected:
Solihull Metropolitan Borough Council		22/10/2001

Summary:

Peastockings is an approximately 5ha area of mostly unimproved grassland. This site has arguably, one of the best unimproved meadow floras in the county. There is an exceptional diversity of species associated with unimproved meadows, including: Saw-wort, Heath Spotted-orchid, Pepper Saxifrage, Betony, Great Burnet, Creeping Jenny, Sneezewort, Harebell, Glaucous Sedge, Lesser Knapweed, Meadowsweet, Lady's Bedstraw, Perforate St John's-wort, Meadow Vetchling, Tormentil, Agrimony, Bugle and Cowslip. This type of vegetation is in serious decline due to agricultural intensification and of national importance.

Site description: Area: 5.32ha

Peastockings is an approximately 5ha area of neutral grassland contained within two small fields. It is situated near Eaves Green in the Meriden area of Solihull. The surrounding land use is improved grassland to the south and east with the large forestry plantation of Meriden Shafts to the north and west. No other unimproved or species rich semi-improved grassland have been identified in the area. The boundaries of the fields have not changed since the first edition Ordnance Survey map, although there appears to have been some marginal woodland encroachment in both fields. North east field.

This field is an unimproved, damp, neutral hay meadow on a slight slope to the north and east. Large areas of the field have MG5 *Cynosurus cristatus-Centaurea nigra* grassland vegetation. The relatively high frequency of Tormentil (*Potentilla erecta*), Betony (*Stachys officinalis*) and Devil's-bit Scabious (*Succisa pratensis*) indicates the vegetation may have an affinity with the MG5c *Danthonia decumbens* sub community.

Sharp-flowered Rush (*Juncus acutiflorus*) is locally abundant over large areas as is Yorkshire-fog (Holcus lanatus). Sweet Vernal-grass (Anthoxanthum odoratum) is frequent and Tussock Grass (Deschampsia cespitosa) is frequent to occasional. Occasional frequency grasses are Common Bent (Agrostis capillaris), Cock's-foot (Dactylis glomerata) and Creeping Soft-grass (Holcus mollis) with rare Meadow Foxtail (Alopecurus pratensis), Crested Dog's-tail (Cynosurus cristatus), Rough Meadow-grass (*Poa trivialis*) and Floating Sweet-grass (*Glyceria fluitans*). Sedges include occasional Hairy Sedge (Carex hirta) with rare Glaucous Sedge (Carex flacca) and Oval Sedge (Carex ovalis). Rushes include occasional Compact Rush (Juncus conglomeratus) and rare Soft-rush (Juncus effusus). The sward is herb rich with an abundance of species indicative of unimproved grassland. Betony, Lesser Knapweed (Centaurea nigra), Bird's-foot-trefoil (Lotus corniculatus), Tormentil, and Creeping Cinquefoil (Potentilla reptans) are abundant to frequent in the dryer areas. Greater Bird's-foot-trefoil (Lotus uliginosus) is abundant to frequent in the wetter areas, here Meadowsweet (Filipendula ulmaria) is locally abundant over small areas. Devil's-bit Scabious, Great Burnet (Sanguisorba officinalis) and Ribwort Plantain (Plantago lanceolata) are frequent to occasional. Occasional frequency herbs are Marsh Thistle (Cirsium palustre), Common Marsh-bedstraw (Galium palustre), Selfheal (Prunella vulgaris), Lesser Spearwort (Ranunculus flammula), Creeping Buttercup (Ranunculus repens), Lesser Stitchwort (Stellaria graminea), Zigzag Clover (Trifolium medium) and White Clover (Trifolium repens). Rare frequency herbs are Sneezewort (Achillea ptarmica), Agrimony (Agrimonia eupatoria), Angelica (Angelica sylvestris), Lady's Bedstraw (Galium verum), Perforate St John's-wort (Hypericum perforatum), Meadow

Vetchling (*Lathyrus pratensis*), Creeping-Jenny (*Lysimachia nummularia*), Dyer's Greenweed (*Genista tinctoria*), Bugle (*Ajuga reptans*), Field Horsetail (*Equisetum arvense*), Corn Mint (*Mentha arvensis*), Common Sorrel (*Rumex acetosa*) and Common Ragwort (*Senecio jacobaea*). There are a few isolated bushes of Hawthorn (*Crataegus monogyna*) and Grey Willow (*Salix cinerea*) within the field.

Meadow Brown (*Maniola jurtina*), Large White (*Pieris brassicae*) and Ringlet (*Aphantopus hyperantus*) are abundant with Small Tortoiseshell (*Agalais urticae*), Six-spot Burnet (*Zygaena filipendulae*) and Gatekeeper (*Pyronia tithonus*) also seen. Grasshoppers (*Orthoptera*) are abundant too.

South west field

This area is Horse grazed semi-improved neutral grassland. The species composition was difficult to asses due to level of grazing the description is therefore likely to be an underestimation of the fields value. The following grasses were recorded, not in order of abundance: Common Bent, Sweet Vernal-grass, Yorkshire Fog, Rye-grass (*Lolium perenne*), Cat's Tail (*Phleum pratense*) and Smooth Meadow-grass (*Poa pratensis*). Hairy Sedge is locally frequent. Creeping Buttercup is locally abundant with locally frequent Bird's-foot-trefoil and Devil's-bit Scabious in small areas only. Occasional frequency herbs are Yarrow (*Achillea millefolium*), Common Mouse-ear (*Cerastium fontanum*), Ribwort Plantain, Tormentil, Lesser Stitchwort and White Clover. Rare frequency herbs are Harebell (*Campanula rotundifolia*), Creeping Thistle (*Cirsium arvense*), Marsh Thistle, Spear Thistle (*Cirsium vulgare*), Autumn Hawkbit (*Leontodon autumnalis*), Greater Plantain (*Plantago major*), Selfheal, Meadow Buttercup (*Ranunculus acris*), Common Sorrel, Broad-leaved Dock (*Rumex obtusifolius*), Common Ragwort, Betony, Red Clover (*Trifolium pratense*), Nettle (*Urtica dioica*) and Germander Speedwell (*Veronica chamaedrys*). Comma (*Polygonia c-album*) and Meadow Brown butterflies are present in this field.

A public right of way runs through the middle of both fields.

Other recent botanical records identified from the field by a local naturalist include Peppersaxifrage (*Silaum silaus*), Heath Spotted-orchid (*Dactylorhiza maculata*), Saw-wort (*Serratula tinctoria*) and Cowslip (*Primula veris*).

There are small areas of marginal woodland included within the SINC boundary. The richest of these is a small area of broad-leaved semi-natural woodland along the eastern margin of the south west field, this contains: Frequent English Oak (*Quercus robur*) standards with occasional Ash (*Fraxinus excelsior*) and Birch (*Betula*). The shrub layer consists of frequent to occasional Hawthorn, Elder (*Sambucus nigra*) and Holly (*Ilex aquifolium*) with rare Hazel (*Corylus avellana*). The ground layer is sparse in areas with locally abundant patches of Nettle, Enchanter's-nightshade (*Circaea lutetiana*) and Dog's Mercury (*Mercurialis perennis*). Occasional in the ground layer are Brambles (*Rubus fruticosus*) and Creeping Buttercup with rare Honeysuckle (*Lonicera periclymenum*), Violets (*Viola*), Lords-and-Ladies (*Arum maculatum*), Greater Stitchwort (*Stellaria graminea*), Wood Speedwell (*Veronica montana*), Broad Bucklerfern (*Dryopteris dilatata*), Male-fern (*Dryopteris filix-mas*), Hogweed (*Heracleum sphondylium*), Herb-Robert (*Geranium robertianum*), Wood Dock (*Rumex sanguineus*) and Red Campion (*Silene dioica*).

The site is tennanted by a local riding club. Currently the north eastern meadow is cut for hay and used for horse jumping whilst the south western meadow is heavily horse grazed.

Phase 1 Habitats present:

Unimproved neutral grassland Semi-improved neutral grassland Broad-leaved semi-natural woodland

Evaluation ag Habitat criter					nd Ma	arsh							
SCIENTIFIC CRITERIA		nents o	of the	criteri	a appl	ying	COMMUNITY CRITERIA	Elements of the criteria applying to the site					
	1	2	3	4	5	6		1	2	3	4	5	
Diversity	3		3	SR			Physical & Visual Access	3					
Rarity	3	3					Educational Value						
Size	3						Community & Amenity Value	3	3				
Naturalness	3						Aesthetic Appeal & Landscape	3	3	3	3		
Fragility	3						Geographical Position	3	3				
Typicalness	3	3					Recorded History						
Ecological Position							Continuity of Landuse	3		3			
Significant Populations	3												
Potential Value													

Peastockings SINC qualifies for 10 scientific and 11 community criteria from the grassland and marsh criteria sets. The most important aspects of the nature conservation importance of the site are naturalness, rarity, diversity, typicalness and physical access.

This site has arguably, one of the best unimproved meadow floras in the county. The sward is very natural with MG5 grassland vegetation and an exceptional diversity of species associated with unimproved meadows, including: Saw-wort, Heath Spotted-orchid, Pepper Saxifrage, Betony, Great Burnet, Creeping Jenny, Sneezewort, Harebell, Glaucous Sedge, Lesser Knapweed, Meadowsweet, Lady's Bedstraw, Perforate St John's-wort, Meadow Vetchling, Tormentil, Agrimony, Bugle and Cowslip. This type of vegetation is in serious decline due to agricultural intensification and of national importance. Saw-wort, Dyer's Greenweed and Heath Spotted-orchid are rare in the county. These three species are listed in the provisional Warwickshire Rare Plants Register as locally scarce.

In terms of diversity the sward is very rich with 60 species recorded during the current survey. This comprises 13 grasses, 3 sedges, 3 rushes and 41 herbs.

A public right of way runs through the field, making the SINC accesible to the public.

L		
Sources of Information : Recorde	er Site No:	Ecosite No:

WSP, WBRC		NA		2/28			
Survey Details:							
Date:	Survey Type:		Surveyors:		Location of records		
23/07/2001	Phase II		Jeff Waddell & David Cole		Wildlife Sites Project		
21/07/1996, 01/06/97 & 06/07/97	Flora 2000 red	cords	Adrian Smith		Warwickshire Biological Records Centre		
Any Other Inform	nation:						
Previously selected January 1989. Mo	-				-		
Completed By: Jo Date: 26/09/200			Map attached: Yes Species list attached: Plant				
Passed by Sites S	election Panel:		rther survey requ lidate Wildlife Si		rircle as opropriate)		
Signed:	<i></i>	Date:					

(Refer to guidelines for completion)

	(Iteje:	te guiaettites jet completion)
Site Name:	Site Ref:	Grid Ref:
Spring Wood	SP28 Q2	SP 260811
Local Authority Area:	Date Selected:	
Solihull Metropolitan Borough Council	26/03/2001	

Site description: Area: 1.57ha

Spring Wood SINC is a small 1.57ha area of native woodland situated in the Millisons Wood area of Solihull. It is part of a small complex of three ancient woodlands in the area including Crow Wood SINC and Millisons Wood LNR both of which are within half a kilometre of Spring Wood Spring Wood is shown on the first edition OS Map with the same boundaries as the present wood. The vegetation is a modified example of W10 *Quercus robur-Pteridium aquilinum-Rubus fruticosus* woodland. The stand is dominated by Birch (*Betula*) throughout and is mostly quite young. Rowan (*Sorbus aucuparia*) is occasional whilst Alder (*Alnus glutinosa*), English Oak (*Quercus robur*) and Crab Apple (*Malus sylvestris*) are rare. Aspen (*Populus tremula*) and Small-leaved Lime (*Tilia cordata*) are present in the far west of the wood. The latter forms over mature coppice stools in the boundary hedge.

The shrub layer is quite sparse, the most frequent component is Hazel (*Corylus avellana*) which is occasional throughout but becomes locally frequent to abundant particularly in the west and near the edges of the wood. Holly (*Ilex aquifolium*) forms small but dense stands which approach the canopy in areas. Elder (*Sambucus nigra*) and Hawthorn (*Crataegus monogyna*) are occasional to rare and Blackthorn (*Prunus spinosa*) is present in the east.

The survey of the ground flora was hampered by a covering of snow but the following observations were made: Bracken (*Pteridium aquilinum*) and Bramble (*Rubus fruticosus*) are abundant to frequent. Honeysuckle (*Lonicera periclymenum*) is occasional to rare. Bluebells (*Hyacinthoides non-scripta*) are present and according to the owners are abundant in the spring. They also reported Primrose (*Primula vulgaris*) is present at a rare frequency.

Other ground layer species recorded were Wood Sorrel (*Oxalis acetosella*), Red Campion (*Silene dioica*), Lesser Celandine (*Ranunculus ficaria*), Male Fern (*Dryopteris filix-mas*) & Broad Buckler Fern (*Dryopteris dilatata*). Their frequencies were not noted due to the snow.

A previous survey (20/09/85) also recorded Wood Millet (*Milium effusum*) and Wood Speedwell (*Veronica montana*).

A small stream runs along the southern boundary of the wood.

Phase 1 Habitats present:

Broad-leaved semi-natural woodland Running water

Evaluation against the criteria Habitat criteria applied: Woodland & Scrub												
SCIENTIFIC						ying	COMMUNITY	Elements of the criteria				a
CRITERIA	to the site						CRITERIA	applying to the site				
	1	2	3	4	5	6		1	2	3	4	5
Diversity	3	3	3		SR		Physical & Visual Access					
Rarity	3						Educational Value					
Size							Community & Amenity Value					
Naturalness	3	3	3	3	3		Aesthetic Appeal & Landscape	3	3	3	3	
Fragility							Geographical Position		3			
Typicalness			3				Recorded History					
Ecological Position	3						Continuity of Landuse	3		3		
Significant Populations												
Potential Value	3											

Spring Wood qualifies for 12 scientific and 7 community criteria.

The most important attributes of the site are its diversity, naturalness, ecological position and potential value.

The site is an ancient, native wood with W10 vegetation which includes the ancient woodland indicator species: Small-leaved Lime, Wood Millet and Wood Sorrel.

There are significant amounts of fallen dead Birch with little evidence of planting or invasive species. The ecological position of the site is important as it is part of a complex of 3 ancient woods in close proximity. Ancient woodland is a locally important habitat type. The stand has been modified by past felling and despite being dominated by pioneer species retains a good diversity of tree species. The potential value of the site could be increased by encouraging more Oak in the stand and perhaps reinstating some coppicing including layering of Hazel and Small-leaved Lime.

W10 woodland is characteristic of the Arden landscape. The wood is a valuable landscape feature.

Sources of Inform WSP,HBA,WBR		Recorder Site N NA	(0:	Ecosite No: 71/28				
Survey Details:								
Date:	Survey Type:		Surveyors:		Location of records			
21/01/01	Phase II		Jeff Waddell		Wildlife Sites Project Habitat Biodiversity Audit			
16/08/96	Phase I		Ian Tanner, Reg	g Elliot				
20/09/85	Phase II		MVC?		Warwickshire Biological Records Centre			
Any Other Information: First selected as a West Midlands SINC on January 1989. The owner expressed an interest in managing the site with regards to nature conservation and requested a FWAG contact.								
Completed By: Jeff Waddell Date: 24/01/01 Map attached: Yes Species list attached: Plant								
Passed by Sites Selection Panel: Yes / No / Further survey required: (circle as candidate Wildlife Site appropriate) Signed: Date:								