

## Wildlife Site Survey Report for: Marshalls Heath LNR

<b>Site Ref:</b>	56/022	<b>Site size (ha):</b>	3.3ha
<b>District:</b>	St Albans	<b>Grid Ref:</b>	TL161149
<b>Surveyors:</b>	AH, CL		
<b>Date of survey:</b>	1/8/12	<b>Weather:</b>	Dry, overcast
		<b>Duration:</b>	3hrs

<b>Geology:</b>	<b>Bedrock:</b>	LEWES NODULAR CHALK FORMATION AND SEAFORD CHALK FORMATION (UNDIFFERENTIATED) - CHALK
	<b>Superficial Deposits:</b>	CLAY-WITH-FLINTS FORMATION - CLAY, SILT, SAND AND GRAVEL (no information about far southern end)

<b>Original criteria:</b>	H.2.2b; H.2.2c	<b>Habitat:</b>	Neutral/acid grassland
<b>Criteria met:</b>	<p>H.2.2b Neutral (8 indicators)</p> <p>H.6.1 Mosaic - note the area of neutral grassland covers approx 30% of the site area. The woodland area has only 8AWIs in total, has an ok structure, but it was a bit late for recording woodland ground flora – so the woodland area isn't even borderline. The grassland area barely meets criteria with only 8 indicators.</p> <p>(H.6.1: Sites will be selected if at least one of the habitats in mosaic is considered to be a borderline Local Wildlife Site. This component should represent a significant proportion of the site, usually &gt;25%)</p>		
<b>Changes to boundary?</b>	<p>Yes – exclude children's play area (which graduates into an improved-type assemblage and is maintained as a very short-mown sward).</p> <p>Discuss with Panel regarding retention or removal of woodland area.</p>		

<b>New Site Description:</b>	<p>A small area of remnant unimproved neutral grassland and secondary woodland surrounded mainly by arable fields to the east and west and residential areas to the south and is bisected by Marshalls Heath Lane. The grassland tends to be dominated by False-oat grass (<i>Arrhenatherum elatius</i>), Yorkshire Fog (<i>Holcus lanatus</i>) and Red Fescue (<i>Festuca rubra</i>), but does have Germander Speedwell (<i>Veronica chamaedrys</i>) plus a variety of other herbs. The western side is locally neutral-acid and has, in addition, species such as Common Bent (<i>Agrostis capillaris</i>) and small amounts of Sweet-vernal Grass (<i>Anthoxanthum odoratum</i>) and Lesser Stitchwort (<i>Stellaria graminea</i>) which occur mainly on anthills. Also present are small amounts of Common Sorrel (<i>Rumex acetosa</i>) and Sheep's sorrel (<i>Rumex acetosella</i>). Species occurring on the road verges and where chalk bedrock occurs closer to the surface on the east of the site are more typical of neutral-calcareous conditions and include Chalk Knapweed (<i>Centaurea debeauxii</i>), Wild Carrot (<i>Daucus carota</i>), Agrimony (<i>Agrimonia eupatoria</i>), Smooth Hawk's-beard (<i>Crepis capillaris</i>), Common Toadflax (<i>Linaria vulgaris</i>) and Ladies Bedstraw (<i>Galium verum</i>). The secondary woodland is dominated by Pedunculate Oak (<i>Quercus robur</i>) with Hawthorn (<i>Crataegus monogyna</i>), Blackthorn (<i>Prunus spinosa</i>), Elder (<i>Sambucus nigra</i>) and Bramble (<i>Rubus fruticosus</i> agg.), Hazel (<i>Corylus avellana</i>) occurs mainly as an old boundary shrub. The site supports a variety of invertebrates with large anthills (<i>Lasius flavus</i>) and several butterfly species. A variety of moths and Glow Worms (<i>Lampyrus noctiluca</i>) have been recorded.</p>
Compartment 1: Short mown grassland area	<p>Common Bent (<i>Agrostis capillaris</i>), Red Fescue (<i>Festuca rubra</i>), Chalk Knapweed (<i>Centaurea debeauxii</i>), Autumn Hawkbit (<i>Leontodon autumnalis</i>), Self-heal (<i>Prunella vulgaris</i>), Ribwort Plantain (<i>Plantago lanceolata</i>) and has a small amount of Sheep's Sorrel (<i>Rumex acetosella</i>) indicating local variation of soils from neutral-calcareous to neutral-acidic.</p> <p>Though a variety of herbs surviving as rosettes or low spreading mats, too well mown to be ideal.</p>

Compartment 2: Unimproved neutral moderately species rich grassland	Tends to be grass dominated particularly by False oat Grass ( <i>Arrhenatherum elatius</i> ) and Yorkshire Fog ( <i>Holcus lanatus</i> ). However is a good example of old grassland habitat because of the large anthills on the west side of the road which also add diversity to the sward having a different species composition to the rest of the sward, particularly covered with large amounts of Common Bent ( <i>Agrostis capillaris</i> ) and lesser amounts of Sweet-vernal Grass ( <i>Anthoxanthum odoratum</i> ) and Lesser Stitchwort ( <i>Stellaria graminea</i> )
Compartment 3: Secondary woodland	Pedunculate oak ( <i>Quercus robur</i> ), English Elm ( <i>Ulmus procera</i> ), Bramble ( <i>Rubus fruticosus</i> ), of no great diversity though does have some old boundary oaks and Hazels ( <i>Corylus avellana</i> )

<b>Fauna:</b>	<b>Birds:</b> Green Woodpecker, Wren, Blue Tit, Chaffinch
	<b>Invertebrates:</b> Banded Demoiselle, Meadow Brown, Gatekeeper, Ringlet, Marbled White, Small White, Small Skipper

<b>Invasive species:</b>	Small amount of garden escapes mainly Canadian Goldenrod, garden yellow loosestrife, but not covering a large area also, Cherry Laurel in wood.
<b>Adjacent landuse</b>	None of particular ecological note, though a new woodland area has been established to the west.
<b>Current Management:</b>	1. Some amenity areas frequently, main area of grassland infrequently 2. Some areas of scrub have been cleared back, especially towards the east.
<b>Recommended Management:</b>	See below
Comp 1	Short mown grassland: extension of short mown grassland area away from play area to the north to be left uncut for the summer months.
Comp 2	Tall unimproved habitat – April mid-July cut for two years to control false oat-grass, take cuttings away. Then cut once annually in September (possible compost area noted on map). Constraints with management would be to avoid damage to the anthills which are an important feature and to maintain habitat continuity for butterfly monitoring.
Comp 3	Consider opening a clearing in the woodland.

<b>Woodland habitat condition (secondary woodland area to East)</b>		
<b>Attributes</b>	<b>Targets for positive condition</b>	<b>detail</b>
<b>Structure and natural processes</b>	UNDERSTOREY (2-5m) present over at least 20% of total stand area (NB: Beech ( <i>Fagus sylvatica</i> ) and Oak ( <i>Quercus</i> ) woods often have sparse shrub layer)	Yes: English Elm ( <i>Ulmus procera</i> ), Holly ( <i>Ilex aquifolium</i> ), Hawthorn ( <i>Crataegus monogyna</i> ), Hazel ( <i>Corylus avellana</i> ), Elder ( <i>Sambucus nigra</i> )
	CANOPY COVER present over 30-90% of stand area (Coppiced stands have lower canopy cover)	Yes: Pedunculate Oak ( <i>Quercus robur</i> )
	AGE CLASSES - at least three, spread across the average life expectancy of the commonest trees	Lack of mid age saplings except elm suckers
	OLD GROWTH FEATURES: Some areas of relatively undisturbed mature/old growth stands or a scatter of large trees allowed to grow to over maturity/death on site (e.g. min of 10% of the woodland or 5-10 trees/hectare)	No – secondary woodland
	FALLEN DEAD: A minimum of 3 fallen lying trees >20cm diameter per ha and 4 trees per ha allowed to die standing	No – only one large fallen tree
<b>Regeneration</b>	Signs of seedlings and saplings growth? – describe age classes and density	Elm suckering, a small amount of ash
	No more than 20% of areas regenerated by planting as opposed to natural regeneration?	No
	Are the new plantings all with natives?	No new plantings
<b>Composition: trees and shrubs</b>	At least 95% of cover in any one layer of site native or acceptably naturalised species	Yes
	Death/destruction of native woodland species through effects of deer/squirrels or other external unnatural factors (e.g fires/flytipping etc) not more than 10% by number of trees? Or not more than 10% of total area ?	Deer probably prevent regeneration

## Species List

Scientific Name	Common Name	WS inds (*a/n/c/w/f) & neg inds ('-')	Comp1 - short mown grassland edges	Comp2 - long un- improved grassland	Comp3 - woodland	all inds	no of comps total
			DAFOR	DAFOR	DAFOR		
<i>Acer campestre</i>	Maple, Field	*			+	X	1
<i>Achillea millefolium</i>	Yarrow			+			1
<i>Agrimonia eupatoria</i>	Agrimony	c/n	+			X	1
<i>Agrostis capillaris</i>	Bent, Common	a/n	F	O	+	X	3
<i>Agrostis gigantea</i>	Bent, Black			+			1
<i>Agrostis stolonifera</i>	Bent, Creeping				R		1
<i>Alliaria petiolata</i>	Mustard, Garlic				+		1
<i>Alopecurus pratensis</i>	Foxtail, Meadow			+			1
<i>Anthoxanthum odoratum</i>	Grass, Sweet Vernal	n		+		X	1
<i>Anthriscus sylvestris</i>	Parsley, Cow	- c/n/w			+		1
<i>Arrhenatherum elatius</i>	Oat-grass, False	- a/c/n/w	+	F	+		3
<i>Artemisia vulgaris</i>	Mugwort			+	+		2
<i>Arum maculatum</i>	Lords-and-Ladies				+		1
<i>Bellis perennis</i>	Daisy	- a/c	+				1
<i>Centaurea debeauxii</i>	Knapweed, Chalk		R	R			2
<i>Chamerion angustifolium</i>	Willowherb, Rosebay	- a/c	+	R	R		3
<i>Cirsium arvense</i>	Thistle, Creeping	- a/c/n/w		+			1
<i>Convolvulus arvensis</i>	Bindweed, Field			+			1
<i>Corylus avellana</i>	Hazel	*			R	X	1
<i>Crataegus monogyna</i>	Hawthorn				R		1
<i>Crepis capillaris</i>	Hawk's-beard, Smooth		R	+			2
<i>Dactylis glomerata</i>	Cocksfoot	- a/c/n/w	+	R	+		3
<i>Daucus carota</i>	Carrot, Wild			R			1
<i>Digitalis purpurea</i>	Foxglove	*		R		X	1
<i>Dryopteris dilatata</i>	Fern, Broad Buckler	*			+	X	1
<i>Dryopteris filix-mas</i>	Fern, Male		+	+	R		3
<i>Elymus caninus</i>	Couch, Bearded				R		1
<i>Elytrigia repens</i>	Couch, Common			+			1
<i>Epilobium montanum</i>	Willowherb, Broad-leaved			+			1
<i>Festuca rubra agg.</i>	Fescue, Red (family)		F	O			2
<i>Fragaria sp.</i>	Strawberry*		+				1
<i>Fraxinus excelsior</i>	Ash			+	R		2
<i>Galeopsis bifida</i>	Hemp-nettle, Bifid		+	+			2
<i>Galium aparine</i>	Cleavers	- c/n		+	+		2
<i>Galium verum</i>	Bedstraw, Lady's	c/n		+		X	1
<i>Geranium robertianum</i>	Herb Robert				+		1
<i>Geum urbanum</i>	Wood Avens			+	R		2
<i>Glechoma hederacea</i>	Ground Ivy			+	+		2
<i>Hedera helix</i>	Ivy				R		1
<i>Heracleum sphondylium</i>	Hogweed			R	+		2
<i>Holcus lanatus</i>	Yorkshire Fog	- a/c/n/w	+	F	+		3
<i>Holcus mollis</i>	Soft-grass, Creeping	a		+		X	1

Scientific Name	Common Name	WS inds (*f/a/n/c/w/f) & neg inds ('-')	Comp1 - short mown grassland edges	Comp2 - long un- improved grassland	Comp3 - woodland	all inds	no of comps total
			DAFOR	DAFOR	DAFOR		
<i>Hypericum perforatum</i>	St John's-wort, Perforate			R			1
<i>Hypochaeris radicata</i>	Cat's-ear, Common		R				1
<i>Ilex aquifolium</i>	Holly	*			R	X	1
<i>Lapsana communis</i>	Nipplewort				+		1
<i>Lathyrus pratensis</i>	Vetchling, Meadow	n		+		X	1
<i>Leontodon autumnalis</i>	Hawkbit, Autumn		R				1
<i>Linaria vulgaris</i>	Toadflax, Common			+			1
<i>Lolium perenne</i>	Rye-grass, Perennial	- a/c/n/w		+			1
<i>Lonicera periclymenum</i>	Honeysuckle			+	+		2
<i>Lysimachia punctata</i>	Loosestrife, Yellow Garden*			+			1
<i>Malus pumila</i>	Apple, domestic*			+			1
<i>Malva sylvestris</i>	Mallow, Common				+		1
<i>Mercurialis perennis</i>	Dog's Mercury	*			+	X	1
<i>Milium effusum</i>	Millet, Wood	*			+	X	1
<i>Odontites vernus</i>	Bartsia, Red			R			1
<i>Pentaglottis sempervirens</i>	Alkanet, Green				+		1
<i>Phleum bertolonii</i>	Catstail, Smaller			R			1
<i>Pimpinella saxifraga</i>	Saxifrage, Burnet	c		+		X	1
<i>Plantago lanceolata</i>	Plantain, Ribwort		R	R			2
<i>Plantago major</i>	Plantain, Greater	- a/c/n		+	+		2
<i>Poa trivialis</i>	Meadow-grass, Rough	- w			+		1
<i>Prunella vulgaris</i>	Selfheal		R				1
<i>Prunus avium</i>	Cherry, Wild	*		+	R	X	2
<i>Prunus sp.</i>	Cultivated cherry*				+		1
<i>Prunus laurocerasus</i>	Laurel, Cherry*				+		1
<i>Prunus spinosa</i>	Blackthorn			+	R		2
<i>Quercus robur</i>	Oak, Pedunculate		+		A		2
<i>Ranunculus repens</i>	Buttercup, Creeping	- w		+			1
<i>Rosa arvensis</i>	Rose, Field	*			+	X	1
<i>Rosa sp.</i>	Rose species			+			1
<i>Rubus fruticosus agg.</i>	Bramble		R	R	F		3
<i>Rubus idaeus</i>	Raspberry		+	+			2
<i>Rumex acetosa</i>	Sorrel, Common	n	R	+	+	X	3
<i>Rumex acetosella</i>	Sorrel, Sheep's	a	+			X	1
<i>Rumex crispus</i>	Dock, Curled	- c/n/w		+			1
<i>Rumex obtusifolius</i>	Dock, Broad-leaved	- c/n/w		+			1
<i>Rumex sanguineus</i>	Dock, Wood			+	+		2
<i>Sambucus nigra</i>	Elder				R		1
<i>Sedum sp.</i>	Stonecrop*			+			1
<i>Senecio jacobaea</i>	Ragwort, Common	- a/c/n	+	+			2
<i>Solanum dulcamara</i>	Bittersweet			+	+		2
<i>Solidago canadensis</i>	Goldenrod, Canadian*			+			1

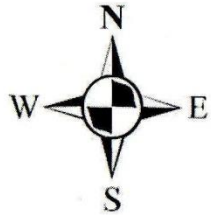
Scientific Name	Common Name	WS inds (*f/a/n/c/w/f) & neg inds ('-')	Comp1 - short mown grassland edges	Comp2 - long un- improved grassland	Comp3 - woodland	all inds	no of comps total
			DAFOR	DAFOR	DAFOR		
<i>Stachys sylvatica</i>	Woundwort, Hedge			+	+		2
<i>Stellaria graminea</i>	Stitchwort, Lesser	a/n	+	R		x	2
<i>Stellaria holostea</i>	Stitchwort, Greater			+	+		2
<i>Tamus communis</i>	Bryony, Black				+		1
<i>Taraxacum officinale agg.</i>	Dandelion family		+		+		2
<i>Torilis japonica</i>	Parsley, Upright Hedge			+	+		2
<i>Trifolium repens</i>	Clover, White	- a/c/n/w	+				1
<i>Triticum aestivum</i>	Wheat, Bread*			+			1
<i>Ulmus procera</i>	Elm, English				R		1
<i>Urtica dioica</i>	Nettle, Stinging	- a/c/n/w	R	R			2
<i>Veronica chamaedrys</i>	Speedwell, Germander	c/n		R	R	x	2
<i>Veronica filiformis</i>	Speedwell, Slender		R				1
<i>Veronica serpyllifolia</i>	Speedwell, Thyme-leaved		+				1
*=planted/introduced/escape	<b>per compartment totals:</b>		<b>29</b>	<b>61</b>	<b>50</b>		

Total species (all comp.s)		total indicators					
97		20					
Comp1 - short mown grassland edges	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	0	4	3	1	0	0	5
Comp2 - long mown grassland	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	2	7	3	3	0	0	9
Comp3 - woodland	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	8	3	1	1	0	0	3
All Compartments:	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	9	8	4	4	0	0	11
Thresholds:	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	min size (ha)	1	0.25	0.25	0.25	0.25	0.25
	min indicators	10	8	5	8	5	12

#### DAFOR Scale:

D	Dominant	>75% cover
A	Abundant	51-75% cover
F	Frequent	26-50% cover
O	Occasional	11-25% cover
R	Rare	<11% cover, >=5 individual plants
+	Very Rare	<5 individual plants

# Map



Wildlife Sites 56/022  
Marshalls Heath LNR

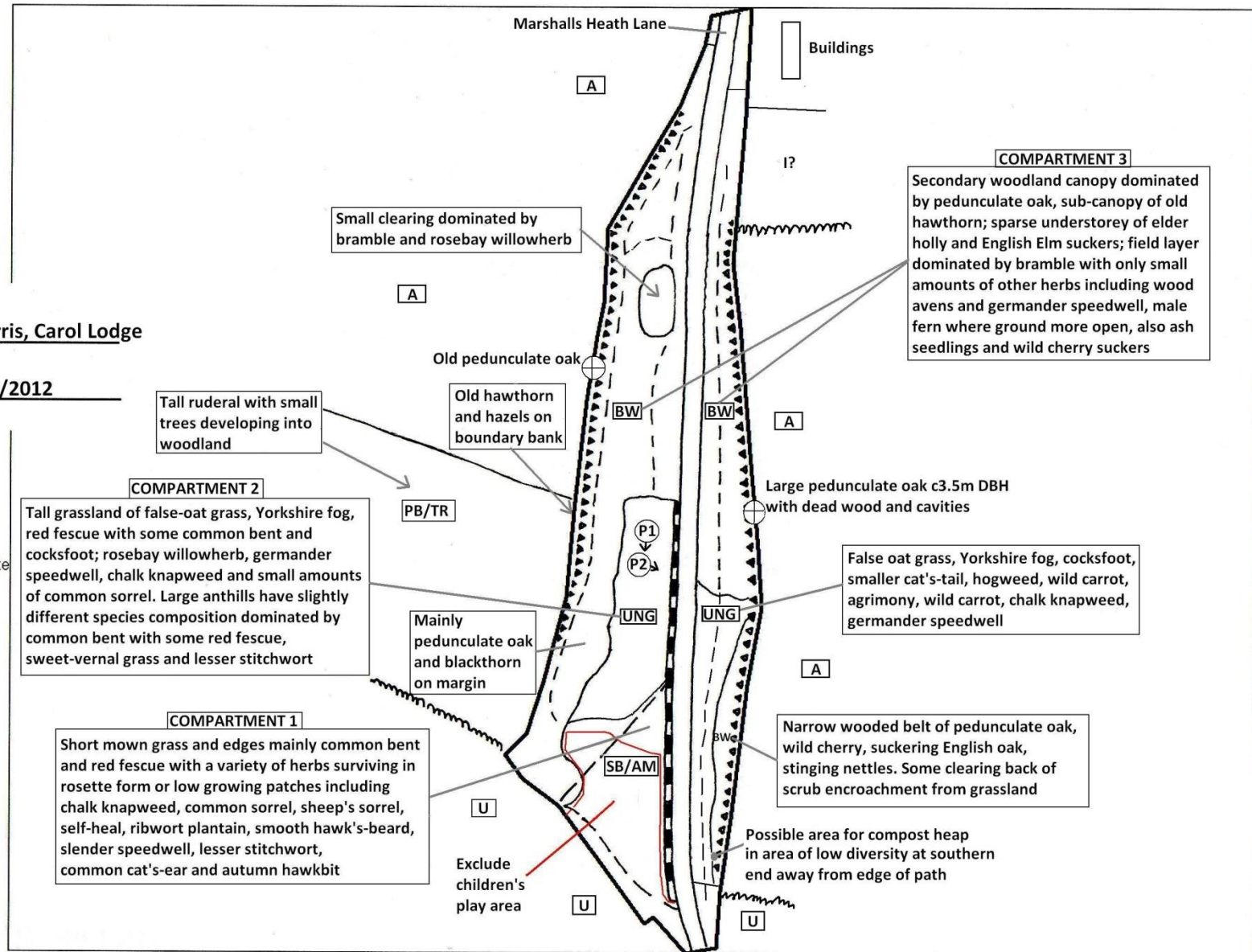
Surveyor: Andrew Harris, Carol Lodge

Date of survey: 01/08/2012

















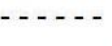






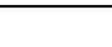


















## Legend

- Wildlife Sites 2010
- Selected Wildlife Site

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**Map key:**

		<b>WS boundary</b> (NB use a red line to denote anywhere boundary changes should be made)	
WOODLAND		Semi-natural broadleaved woodland	 Coppiced broadleaved woodland
		Plantation broadleaved woodland	 Relict coppiced broadleaved woodland
		Plantation coniferous woodland	
		Mixed woodland	
		Dense-continuous scrub	
		Scattered scrub (NB: notate grassland type beneath)	
		Broadleaved Parkland/scattered trees (NB: notate grassland type beneath)	
		Coniferous Parkland/scattered trees (NB: notate grassland type beneath)	
		Mixed Parkland/scattered trees (NB: notate grassland type beneath)	
		Broadleaved recently felled woodland	
URBAN		Coniferous recently felled woodland	
		Mixed recently felled woodland	
	<hr/>		
GRASSLAND		Unimproved acid grassland	 Path  Track/lane/road  Hedgerow  Ditch  Bank  Feature (annotate)  Stream  Fence
		Semi-improved acid grassland	
		Unimproved calcareous grassland	
		Semi-improved calcareous grassland	
		Unimproved neutral grassland	
		Semi-improved neutral grassland	
		Improved grassland	
		Marsh/marshy grassland	
		Species-poor semi-improved grassland	
	<hr/>		
Tall herb and fen		Continuous bracken	
		Scattered bracken (NB: notate grassland type beneath)	
		Tall ruderal vegetation	
		Non-ruderal vegetation (fen, e.g. reed/sweetgrass dominant stands)	
<hr/>			
WATER		Standing water	
		Running water	
<hr/>			
CULTIVATED		Arable land	
		Amenity grassland	 Urban
		Ephemeral/short (e.g. herbal pioneer communities/weedy species)	
		Perennial introduced shrub (eg snowberry, rhododendron, laurel, cotoneaster, bamboo etc)	



**Images**



Photo 1 – tall grassland western side



Photo 2 - large anthill with species composition differing from surrounding grassland

## Surveyors List:

Carol Lodge	CL
Jenny Sherwen	JS
Jim Eggington	JE
Alec Cooper	AC
Ruth Graham	RG
Phil Aldwinckle	PA
Janet Lowndes	JL
Ken Coyne	KC
Claudia Harflet	CH
Emily Power	EP
Jean Williamson	JW
Andrew Harris	AH
Nigel Agar	NA
Julie Wise	JW2
Margaret Harris	MH
Laurie Harris	LH
John Moss	JM
Odette Carter	OC
Dawn Allwood	DA
Brenda Harold	BH
Graham Everett	GE
Stephen Mason	SM
Molly Egginton	ME