

## Wildlife Site Survey Report for: Wheathampstead LNR

<b>Site Ref:</b>	56/044	<b>Site size (ha):</b>	5.87
<b>District:</b>	St Albans	<b>Central Grid Ref:</b>	TL177131
<b>Surveyors:</b>	Andrew Harris		
<b>Spp list by:</b>	AH	<b>Form by:</b>	AH
<b>Date of survey:</b>	12/08/2013 14/08/2013 21/08/2013	<b>Weather:</b>	Overcast Overcast Sunshine
		<b>Map by:</b>	AH
		<b>Duration on site:</b>	2 hours 1.5 hours 1.5 hours

<b>Geology:</b>	<b>Bedrock:</b>	Chalk
	<b>Superficial Deposits:</b>	Clay with flints formation – clay, silt, sand and gravel

<b>Original criteria:</b>	H.2.2b - NVC community specific - Neutral, grassland supporting a high diversity of plant species and species indicative of substantially unimproved swards:- Neutral	<b>Habitat:</b>	Grassland: neutral, unimproved, Scrub, Hedge, Ditch,
<b>Criteria met:</b>	H.2.2.b (neut. 18); H.2.2.a (calc. 18); H.2.2.d (wet 5); H.2.2.e (mixed 28)		
<b>Recommended changes to boundary</b>	None		
<b>Original Site Description:</b>	The site supports a mosaic of habitats including unimproved neutral grassland, an area of rough grass and ruderal habitat on imported chalky substrate, thorn scrub grading into secondary Ash ( <i>Fraxinus excelsior</i> ) woodland, mature hedgerows including Ash, Field Maple ( <i>Acer campestre</i> ) and Pedunculate Oak ( <i>Quercus robur</i> ), and a pond/scrape area. A wide variety of plants have been recorded including Grass Vetchling ( <i>Lathyrus nissolia</i> ), Bee Orchid ( <i>Ophrys apifera</i> ), Oxeye Daisy ( <i>Leucanthemum vulgare</i> ), Common Knapweed ( <i>Centaurea nigra</i> ), Heath Bedstraw ( <i>Galium saxatile</i> ), Cowslip ( <i>Primula veris</i> ), Field Scabious ( <i>Knautia arvensis</i> ) and Bird's-foot Trefoil ( <i>Lotus corniculatus</i> ). Wildlife Site criteria: Grassland indicators.		
<b>Overall General Site Description:</b>	This site, to the south of Butterfield Road, Wheathampstead, is located between residential areas and arable land. Gently sloping to the south, it supports a mosaic of habitats including neutral grassland, calcareous grassland, ruderal habitat on imported chalky substrate, a pond/scrape area and thorn scrub grading into secondary Ash ( <i>Fraxinus excelsior</i> ) Woodland with mature boundary hedgerows. A wide variety of plants have been recorded including Common Bent ( <i>Agrostis capillaris</i> ), Meadow Barley ( <i>Hordeum secalinum</i> ), Wild Carrot ( <i>Daucus carota</i> ) Meadow Vetchling ( <i>Lathyrus pratensis</i> ), Chalk Knapweed ( <i>Centaurea debeauxii</i> ), Agrimony ( <i>Agrimonia eupatoria</i> ), Bird's-foot Trefoil ( <i>Lotus corniculatus</i> ), Field Scabious ( <i>Knautia arvensis</i> ) and Fleabane ( <i>Pulicaria dysenterica</i> ). The hedgerows have Field Maple ( <i>Acer campestre</i> ) Pedunculate Oak ( <i>Quercus robur</i> ) and Hazel ( <i>Corylus avellana</i> ), Wood Meadow-grass ( <i>Poa nemoralis</i> ) and Early Dog-violet ( <i>Viola reichenbachiana</i> ) which have spread from them into the surrounding secondary woodland. Wildlife Site Criteria: Grassland indicators		

<p>Compartment 1: Grassland Neutral, grazed</p> <p>6 fig central grid ref: TL176132</p>	<p>Grasses in order of frequency: <i>Arrhenatherum elatius</i>, <i>Festuca rubra</i>, <i>Holcus lanatus</i>, <i>Dactylis glomerata</i>, <i>Elytrigia repens</i>, <i>Poa pratensis</i>, <i>Elytrigia repens</i>, <i>Agrostis</i> spp, <i>Hordeum secalinum</i>. Herbs: <i>Heracleum sphondylium</i>, <i>Lathyrus pratensis</i>, <i>Daucus carota</i>, <i>Pulicaria dysenterica</i>, <i>Achillea millefolium</i>, <i>Knautia arvensis</i>, <i>Lotus corniculatus</i>.</p> <p>Scattered scrub mainly <i>Crataegus monogyna</i> well grazed by sheep, small copse on south-eastern side with large spreading <i>Salix caprea</i>, <i>Quercus robur</i> (sapling and young tree), <i>Malus pumila</i>, <i>Rosa arvensis</i></p> <p>Grass : herb (excl. negative indicators) ratio 95%: 5%. The rather low figure of herbs compared to other compartments may be due to the time of year.</p>
<p>Compartment 2: Grassland, Neutral, cut</p> <p>6 fig central grid ref: TL175130</p>	<p>Grasses in order of frequency: <i>Arrhenatherum elatius</i>, <i>Holcus lanatus</i>, <i>Festuca rubra</i>, <i>Dactylis glomerata</i>, <i>Agrostis capillaris</i>, <i>Agrostis stolonifera</i>, Herbs: <i>Convolvulus arvensis</i>, <i>Daucus carota</i>, <i>Lathyrus pratensis</i>, <i>Clinopodium vulgare</i>, <i>Senecio erucifolius</i>, <i>Odontites vernus</i>, <i>Vicia hirsuta</i>, <i>Centaurea debeauxii</i>, <i>Trifolium campestre</i>, <i>Veronica chamaedrys</i></p> <p>Grass: Herb ratio 85% -15%</p>
<p>Compartment 3: Grassland Calcareous</p> <p>6 fig central grid ref: TL172131</p>	<p>Calcareous grassland, a mixture of short open areas medium height with dense vegetation and some taller more ruderal areas: Grasses: <i>Agrostis stolonifera</i>, <i>Arrhenatherum elatius</i>, <i>Festuca rubra</i>, <i>Briza media</i>, <i>Koeleria macrantha</i>, <i>Holcus lanatus</i>, <i>Phleum bertolonii</i>, <i>Dactylis glomerata</i>, Herbs: <i>Lotus corniculatus</i>, <i>Galium verum</i>, <i>Galium mollugo</i>, <i>Daucus carota</i>, <i>Senecio erucifolius</i>, <i>Agrimonia eupatoria</i>, <i>Leontodon hispidus</i>, <i>Leucanthemum vulgare</i>, <i>Origanum vulgare</i>, <i>Centaurea debeauxii</i>, <i>Poterium sanguisorba</i>, <i>Melilotus altissimus</i>, <i>Trifolium pratense</i> var. <i>pratense</i>, <i>Primula veris</i>. <i>Torilis japonica</i></p> <p>Grass: Herb ratio 65% - 35%</p>
<p>Compartment 4: Grassland: Wet scrape</p> <p>6 fig central grid ref: TL173131</p>	<p>A small damp depression enclosed by scrub has some similarities with the neighbouring calcareous grassland, but more wetland species: Grasses <i>Festuca rubra</i>, <i>Deschampsia cespitosa</i> and <i>Agrostis stolonifera</i> particularly in the damp centre; additionally, <i>Holcus lanatus</i>, and <i>Dactylis glomerata</i> where it is driest. Herbs: <i>Filipendula ulmaria</i>, <i>Pulicaria dysenterica</i>, <i>Silene flos-cuculi</i>, <i>Achillea ptarmica</i> and <i>Iris pseudacorus</i> in the wetter centre. Around the margins <i>Galium verum</i>, <i>Primula veris</i>, <i>Potentilla reptans</i>, <i>Centaurea debeauxii</i>, <i>Agrimonia eupatoria</i>, <i>Leucanthemum vulgare</i>, <i>Lathyrus pratensis</i> and <i>Trifolium pratense</i> var. <i>pratense</i>.</p> <p>Grass: Herb ratio 80% - 20%</p>
<p>Compartment 5: Woodland: scrub</p> <p>6 fig central grid ref: TL174131</p>	<p>Even age scrub mainly of <i>Crataegus monogyna</i> with some <i>Acer campestre</i>, <i>Fraxinus excelsior</i> and other shrubs and young trees. Ground largely devoid of herbs beneath the dense thicket but there is a grassy path through with a few small glades. One bordering the playing field has mixed herbs and grasses including <i>Epilobium hirsutum</i>, <i>Agrimonia eupatoria</i> and <i>Lathyrus pratensis</i>, more open areas bordering the chalk bank are ruderal. Herbs &lt;5%</p>
<p>Compartment 6: Grassland Ruderal/ calcareous on Chalk slope</p> <p>6 fig central grid</p>	<p>A strip of ruderal dominated vegetation on a steeply sloping bank. There is a high coverage of <i>Calystegia sylvatica</i>, <i>Urtica dioica</i> and <i>Heracleum sphondylium</i> and some <i>Dipsacus fullonum</i>, <i>Galium aparine</i> and <i>Cirsium arvense</i>, but there is also <i>Origanum vulgare</i>, <i>Centaurea debeauxii</i>, <i>Centaurea scabiosa</i>, <i>Agrimonia eupatoria</i>, <i>Knautia arvensis</i> among the ruderals particularly towards the eastern end. The strip of vegetation</p>

ref: TL174130	merges into the species-rich calcareous flora described under Compartment 3
Compartment 7: Woodland, South/south-west corner  6 fig central grid ref: TL173130	Reasonable structure secondary/planted Woodland: Sapling/young Fraxinus, some Acer campestre, Quercus robur and Prunus avium. Understorey with young trees as above plus Crataegus monogyna and Corylus avellana. Field layer mainly Hedera helix with some Stellaria holostea. An old boundary hedge on south and west sides has old Fraxinus stools, mature Quercus robur standards and much Corylus avellana. It is the source of Ulmus procera and woodland herbs Elymus canina, Poa nemoralis, Mercurialis perennis and Viola reichenbachiana which are spreading into the woodland. The internal margin of the woodland grades into Crataegus scrub.
Compartment 8: Woodland, south-east corner  6 fig central grid ref: TL176131	Woodland/scrub SE corner: Canopy: Acer campestre, Fraxinus excelsior, Quercus robur. Understorey: Crataegus monogyna, Corylus avellana, Prunus spinosa (on edge), Cornus sanguinea, Euonymus europaeus. Field layer: Large areas exclusively Hedera helix or devoid of vegetation but a small amount of Mercurialis Perennis, Poa nemoralis, Poa trivialis and Stellaria holostea; also numerous tree seedlings mainly Fraxinus. Very small glade with Primula veris. Like Compartment 7, it has boundaries of more ancient origin - a hedgebank (in compartment 8) and road bank (Compartment9).
Compartment 9: Roadside margin  6 fig central grid ref: TL176131	Top of roadside bank, canopy largely early/semi-mature Quercus robur with an older mature tree. Also a couple of Carpinus betulus and mature Crataegus monogyna at southern end. Understorey includes Ilex aquifolium and much Rosa arvensis. Field layer with Hedera helix, Mercurialis perennis and Poa nemoralis.

<b>Fauna:</b>	<b>Birds:</b>	Woodpigeon, Magpie, Long-tailed Tit, Whitethroat, Wren, Blackbird, Chaffinch, Bullfinch
	<b>Mammals:</b>	
	<b>Invertebrates:</b>	Butterflies and moths: Common Blue, Gatekeeper, Large White, Mother-of-Pearl,  Red-tailed Bumblebee, White-tailed Bumblebee, Marmalade Fly ( <i>Episyrphus balteatus</i> ), Anthills
	<b>Other:</b>	Typical lichen communities <i>Lecanora chlarotera</i> and <i>Lecidella elaeochroma</i> on smooth bark; <i>Xanthoria parietina</i> and <i>Physcia</i> spp generally on rougher barked twigs
<b>Invasive species:</b>	Goat's Rue <i>Galega officinalis</i> (Single plant)	
<b>Current Management:</b>	Conservation grassland areas: The northern section (Compartment 1 in this report) is grazed by sheep from July. There is control of Ragwort where stock graze The central area (Compartment 2) is cut and raked at the end of September (Compartment 2). The calcareous grassland wet scrape area and chalk bank (Compartments 3, 4, 6) are cut and raked at the end of February. Tree/scrub areas (Compartment 5, 7, 8) paths are kept open Ash trees	

	thinned.
<b>Recommended Management:</b>	The current management looks good as it is, the following additional suggestions are made to enhance the ecological value still further
Compartment 1, 2, 3, 4 Grassland	Cut back scrub edges if they start to encroach on the grassland. Check that ash seeding into the calcareous grassland areas does not become a problem though the current cutting probably controls it already. Remove Goat's Rue
Compartment 6: Grassland , ruderal dominated area of chalk bank	Suggest an additional mid-season cut of the most ruderal dominated areas in order in an attempt to reduce the vigour of the ruderals to give the calcareous grassland plants a better chance and to prevent the ruderal vegetation from invading the prime area of calcareous grassland at the western end
Compartment 6,7,8	Keep current management as it is. Keep any small glades in the scrub open slightly enlarged by coppicing surrounding bushes.

<b>Surrounding landuse</b>	Agricultural on all sides except the north which is residential housing.
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<b>Table 1: Woodland habitat condition</b> (this is broadly based on Natural England's Common Standards Monitoring 2005)		
<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)	Just about - varies in structure some Hawthorn, Hazel, English Elm and sapling trees. Some areas more mature scrub than woodland
	CANOPY COVER present over 30-90% of stand area (Coppiced stands have lower canopy cover)	Yes mainly Ash, Field Maple, Pedunculate Oak, some Wild Cherry
	AGE CLASSES (seedlings, saplings, young, semi-mature, early-mature, mature+) – list the age classes present, spread across the average life expectancy of the commonest trees	Mainly young but hedgerows have some standard trees
	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)	Only on woodbank – here some old coppice stools, and mature standard oaks starting to get old growth features. Large Goat Willow – old for short lived species
	FALLEN DEAD WOOD: A minimum of 3 fallen lying trees >20cm diameter per ha and 4 trees per ha allowed to die standing	No
<b>Regeneration</b>	Are there signs of seedlings and saplings growth by natural regeneration? – describe age classes (seedlings, saplings, young) and density	Yes mainly seedlings and saplings of Ash
	No more than 20% of areas regenerated by planting as opposed to natural regeneration?	Some area may have been originally planted none recently
	Are the new plantings all with natives?	Yes
<b>Composition: trees and</b>	At least 95% of cover in any one layer of site native or acceptably naturalised species	Yes

<b>shrubs</b>	Death/destruction/damage of native woodland species through effects of deer/squirrels/Ash-die-back or other external unnatural factors (e.g fires/flytipping etc) not more than 10% of total area?	No
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<b>TABLE 2: Grassland habitat condition assessment – for information</b>	
This is broadly based on Natural England’s Common Standards Monitoring 2005 which has been used to assess the condition of the main habitats present on Sites of Special Scientific Interest.	
To help with the identification of grassland-type habitats and their condition, please use the following list of Negative Condition Indicators (species) for the typical open habitats found in Hertfordshire. They are divided in to three different ecological groups as below:	
<p><b>Agricultural weeds (indicating increased soil nutrient levels in previously low-nutrient swards, and high levels of disturbance)</b></p> <p>These species are particularly negative from both the agricultural and ecological perspectives, and usually indicate both disturbance and increased nutrient levels.</p>	<p><u>Including these herbs:</u> Creeping and Spear Thistle, Broad-leaved and Curled Dock, Common Ragwort, Nettle, Greater Plantain, Cleavers, Cow Parsley and Field Horsetail, Daisy, Common Mouse-ear, Rosebay Willowherb, Sow Thistles.</p>
<p><b>Agriculturally favoured species (indicating increased eutrophication)</b></p> <p>These species are positive from the agricultural perspective. Ecologically however these species represent high soil nutrient levels, but not disturbance. While a few of these species are a normal component of ecologically valuable communities, a high frequency of these species indicates negative condition.</p>	<p><u>Including herbs:</u> White Clover, Creeping Buttercup;</p> <p><u>Grasses:</u> Perennial Rye-grass, Yorkshire Fog, Soft Brome, Timothy, Floating Sweet-grass, Rough Meadow-grass</p>
<p><b>Rank grasses, rushes and sedges</b></p> <p>if very abundant, these species indicate lack of appropriate management and/or waterlogging.</p>	<p>Including False Oat-grass, Cock’s-foot, Tufted Hair-grass, Perennial Rye-grass, large-leaved sedge species, Reed Sweet-grass</p>







17/07/2013

**District Boundary**  
  
**Specified Wildlife Site**  
 56/044



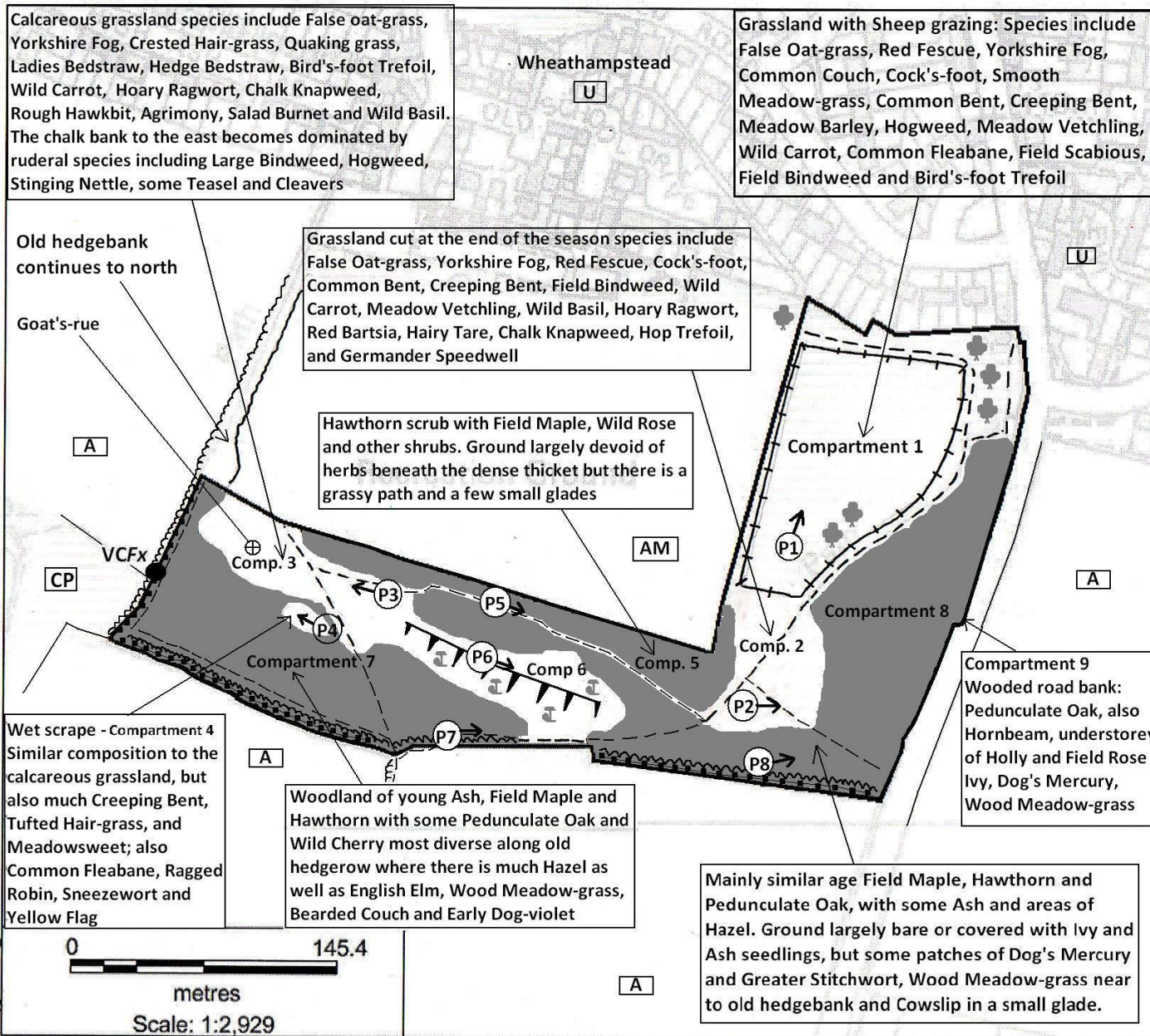
**LEGEND**


- Hedgebank
- Ruderal
- VCFx Old coppiced Ash stool

Surveyor Name: Andrew Harris













Survey Date: 12.08.2013  
 14/08/2013  
 21/08/2013



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

 **WS boundary** (NB use a red line to denote anywhere boundary changes should be made)









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-  BW Semi-natural broadleaved woodland
-  PB Plantation broadleaved woodland
-  PC Plantation coniferous woodland
-  MW Mixed woodland
-  DS Dense-continuous scrub
-  SS Scattered scrub (NB: notate grassland type beneath)
-  SB Broadleaved Parkland/scattered trees (NB: notate grassland type beneath)
-  SC Coniferous Parkland/scattered trees (NB: notate grassland type beneath)
-  SM Mixed Parkland/scattered trees (NB: notate grassland type beneath)
-  FB Broadleaved recently felled woodland
-  FC Coniferous recently felled woodland
-  FM Mixed recently felled woodland





-  CBW Coppiced broadleaved woodland
-  RCBW Relict coppiced broadleaved woodland

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

-  UAG Unimproved acid grassland
-  SIAG Semi-improved acid grassland
-  UCG Unimproved calcareous grassland
-  SICG Semi-improved calcareous grassland
-  UNG Unimproved neutral grassland
-  SING Semi-improved neutral grassland
-  I Improved grassland
-  MG Marsh/marshy grassland
-  PSIG Species-poor semi-improved grassland

-  Path
-  Track/lane/road
-  Hedgerow
-  Ditch
-  Bank
-  Feature (annotate)
-  Stream
-  Fence






Tall  
herb  
and  
fen

-  CB Continuous bracken
-  SB Scattered bracken (NB: notate grassland type beneath)
-  TR Tall ruderal vegetation
-  NR Non-ruderal vegetation (fen, e.g. reed/sweetgrass dominant stands)

WATER

-  SW Standing water
-  RW Running water

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-  A Arable land
-  AM Amenity grassland /  U Urban
-  ESP Ephemeral/short (e.g. herbal pioneer communities/weedy species)
-  IS Perennial introduced shrub (eg snowberry, rhododendron, laurel, cotoneaster, bamboo etc)



## Species List

<b>Wheathampstead LNR Aug 2013 A. T. Harris</b>			Comp1 - Grassland, grazed 21/08/2013	Comp2 - Grassland, mown 21/08/2013	Comp3 Grassland, calcareous 12/08/2013	Comp4 Grassland, Wet scrape 12/08/2013	Comp5 Woodland, Scrub 14/08/2013	Comp6 Grassland, Chalk Slope 12/08/2013	Comp7 Woodland, South 14/08/2013	Comp8 Woodland, East 14/08/2013	Comp9 Road edge 21/08/2013
<b>Scientific Name</b>	<b>Common Name</b>	WS inds (* /a/n/c/w/f) & neg inds (-)	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR
<i>Acer campestre</i>	Maple, Field	*	+	+	+		O		O	F	O
<i>Acer pseudoplatanus</i>	Sycamore								+		
<i>Achillea millefolium</i>	Yarrow		R	R	R			+			
<i>Achillea ptarmica</i>	Sneezewort	a/n/w				R					
<i>Agrimonia eupatoria</i>	Agrimony	c/n	R	R	R	R	R	R	+		
<i>Agrostis capillaris</i>	Bent, Common	a/n	R	R							
<i>Agrostis stolonifera</i>	Bent, Creeping		R	R		O					
<i>Alliaria petiolata</i>	Mustard, Garlic								R		
<i>Anthriscus sylvestris</i>	Parsley, Cow	- c/n/w							R		
<i>Anthyllis vulneraria</i>	Vetch, Kidney^	c			R						
<i>Arctium minus</i>	Burdock, Lesser								+		
<i>Armoracia rusticana</i>	Horse-radish*						R	+			
<i>Arrhenatherum elatius</i>	Oat-grass, False	- a/c/n/w	F	F	O		R	R			
<i>Artemisia vulgaris</i>	Mugwort							R			
<i>Arum maculatum</i>	Lords-and-Ladies									+	+
<i>Aster agg</i>	Aster, Garden cultivar*					+					
<i>Bellis perennis</i>	Daisy	- a/c					+				
<i>Betula pendula</i>	Birch, Silver								+		
<i>Briza media</i>	Grass, Quaking	c/n			R	R					
<i>Bromus hordeaceus</i>	Brome, Soft	- n		R							
<i>Calystegia silvatica</i>	Bindweed, Large						R	A	R		
<i>Carpinus betulus</i>	Hornbeam	*									R
<i>Centaurea debeauxii</i>	Knapweed, Chalk~	c/n		R	O	R	R	R			
<i>Centaurea scabiosa</i>	Knapweed, Greater	c						R			
<i>Cerastium fontanum</i>	Mouse-ear, Common	- a	R	R							
<i>Chaerophyllum temulum</i>	Chervil, Rough								R		

<b>Wheathampstead LNR Aug 2013 A. T. Harris</b>			Comp1 - Grassland, grazed 21/08/2013	Comp2 - Grassland, mown 21/08/2013	Comp3 Grassland, calcareous 12/08/2013	Comp4 Grassland, Wet scrape 12/08/2013	Comp5 Woodland, Scrub 14/08/2013	Comp6 Grassland, Chalk Slope 12/08/2013	Comp7 Woodland, South 14/08/2013	Comp8 Woodland, East 14/08/2013	Comp9 Road edge 21/08/2013
<b>Scientific Name</b>	<b>Common Name</b>	WS inds (* /a/n/c/w/ft) & neg inds ('-')	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR
<i>Cirsium arvense</i>	Thistle, Creeping	- a/c/n/w	R	R	R			R			
<i>Cirsium vulgare</i>	Thistle, Spear	- a/c/n/w	R								
<i>Clematis vitalba</i>	Clematis						R		+		
<i>Clinopodium vulgare</i>	Basil, Wild		R	R	+		+	+			
<i>Convolvulus arvensis</i>	Bindweed, Field		R	R			R				
<i>Cornus sanguinea</i>	Dogwood						R			R	
<i>Corylus avellana</i>	Hazel	*							O	O	F
<i>Crataegus monogyna</i>	Hawthorn		R	R		+	A		O	F	R
<i>Cynosurus cristatus</i>	Dog's-tail, Crested	n			+			+			
<i>Dactylis glomerata</i>	Cocksfoot	- a/c/n/w	R	R		R	R	R	R		+
<i>Daphne laureola</i>	Spurge-laurel									+	
<i>Daucus carota</i>	Carrot, Wild		R	R	O			R			
<i>Deschampsia cespitosa</i>	Hair-grass, Tufted	- n/w				O					
<i>Dipsacus fullonum</i>	Teasel, Wild			R	R	+	+	R			
<i>Dryopteris filix-mas</i>	Fern, Male								R	+	
<i>Elymus caninus</i>	Couch, Bearded								R	+	
<i>Elytrigia repens</i>	Couch, Common		R	R			+	+			
<i>Epilobium hirsutum</i>	Willowherb, Great				R		R				
<i>Euonymus europaeus</i>	Spindle									+	
<i>Festuca rubra</i> agg.	Fescue, Red (family)		F	O	R	O		R			
<i>Filipendula ulmaria</i>	Meadowsweet	f/w				O					
<i>Fraxinus excelsior</i>	Ash					+	R	R	F	O	R
<i>Galega officinalis</i>	Goat's-rue*				R						
<i>Galium aparine</i>	Cleavers	- c/n	R				R	R	R	+	
<i>Galium mollugo</i>	Bedstraw, Hedge				O		+	+			
<i>Galium verum</i>	Bedstraw, Lady's	c/n			O	R		R		R	

<b>Wheathampstead LNR Aug 2013 A. T. Harris</b>			Comp1 - Grassland, grazed 21/08/2013	Comp2 - Grassland, mown 21/08/2013	Comp3 Grassland, calcareous 12/08/2013	Comp4 Grassland, Wet scrape 12/08/2013	Comp5 Woodland, Scrub 14/08/2013	Comp6 Grassland, Chalk Slope 12/08/2013	Comp7 Woodland, South 14/08/2013	Comp8 Woodland, East 14/08/2013	Comp9 Road edge 21/08/2013
<b>Scientific Name</b>	<b>Common Name</b>	WS inds (* /a/n/c/w/f) & neg inds ('-')	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR
<i>Geranium molle</i>	Cranesbill, Dove's-foot						+				
<i>Geranium robertianum</i>	Herb Robert										R
<i>Geum urbanum</i>	Wood Avens						+		R	R	
<i>Glechoma hederacea</i>	Ground Ivy								R		
<i>Hedera helix</i>	Ivy								A	A	A
<i>Heracleum sphondylium</i>	Hogweed		R	R	R			F	+		
<i>Holcus lanatus</i>	Yorkshire Fog	- a/c/n/w	R	F	R	R	R	R			
<i>Hordeum secalinum</i>	Barley, Meadow	n	R								
<i>Hypericum perforatum</i>	St John's-wort, Perforate			R		+		R			
<i>Ilex aquifolium</i>	Holly	*							+	+	R
<i>Iris pseudacorus</i>	Iris, Yellow flag					R					
<i>Knautia arvensis</i>	Scabious, Field	c/n	R		R			R			
<i>Koeleria macrantha</i>	Hair-grass, Crested	c			R						
<i>Lamium album</i>	Dead Nettle, White							R			
<i>Lapsana communis</i>	Nipplewort								R		
<i>Lathyrus pratensis</i>	Vetchling, Meadow	n	R	R	R	R	+				
<i>Leontodon hispidus</i>	Hawkbit, Rough	c/n			R						
<i>Leucanthemum vulgare</i>	Daisy, Oxeye	c/n			R	R		+			
<i>Ligustrum vulgare</i>	Privet, Wild						+				
<i>Lolium perenne</i>	Rye-grass, Perennial	- a/c/n/w		R	R						
<i>Lotus corniculatus</i>	Bird's-foot-trefoil, Com'n	c/n	+		O	R		R		R	
<i>Malus pumila</i>	Apple, domestic*		+				+				
<i>Malva moschata</i>	Mallow, Musk				+			+		+	
<i>Medicago lupulina</i>	Medick, Black		+	R							
<i>Melilotus altissimus</i>	Melilot, Tall				R	R		R			
<i>Mercurialis perennis</i>	Dog's Mercury	*							R	R	

<b>Wheathampstead LNR Aug 2013 A. T. Harris</b>		WS inds (* /a/n/c/w/ft) & neg inds ('-')	Comp1 - Grassland, grazed 21/08/2013	Comp2 - Grassland, mown 21/08/2013	Comp3 Grassland, calcareous 12/08/2013	Comp4 Grassland, Wet scrape 12/08/2013	Comp5 Woodland, Scrub 14/08/2013	Comp6 Grassland, Chalk Slope 12/08/2013	Comp7 Woodland, South 14/08/2013	Comp8 Woodland, East 14/08/2013	Comp9 Road edge 21/08/2013
<b>Scientific Name</b>	<b>Common Name</b>		DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR
<i>Odontites vernus</i>	Bartsia, Red		R	R	R	+	+				
<i>Origanum vulgare</i>	Marjoram, Wild	c			R			R			
<i>Phleum bertolonii</i>	Catstail, Smaller				R						
<i>Plantago lanceolata</i>	Plantain, Ribwort		R	R	R	+		R			
<i>Plantago major</i>	Plantain, Greater	- a/c/n		R	R			R		+	
<i>Plantago media</i>	Plantain, Hoary	c			+						
<i>Poa nemoralis</i>	Meadow-grass, Wood	*							R	R	R
<i>Poa pratensis</i>	Meadow-grass, Smooth		R	R							
<i>Poa trivialis</i>	Meadow-grass, Rough	- w		R	R	R	R	R	R		
<i>Populus tremula</i>	Aspen	*									+
<i>Potentilla reptans</i>	Cinquefoil, Creeping					R		R			
<i>Poterium sanguisorba ssp. Sanguisorba</i>	Burnet, Salad	c			R			R			
<i>Primula veris</i>	Cowslip	c/n			R	R				R	
<i>Prunella vulgaris</i>	Selfheal							+	R		
<i>Prunus avium</i>	Cherry, Wild	*						R	R		+
<i>Prunus spinosa</i>	Blackthorn		R	R				R	+	R	R
<i>Pulicaria dysenterica</i>	Fleabane, Common	w	R			O					
<i>Quercus robur</i>	Oak, Pedunculata		+	R				R		O	O
<i>Ranunculus acris</i>	Buttercup, Meadow	n				+					
<i>Ranunculus bulbosus</i>	Buttercup, Bulbous	c/n			+						
<i>Ranunculus repens</i>	Buttercup, Creeping	- w	R					R			
<i>Rosa arvensis</i>	Rose, Field	*	+								R
<i>Rosa canina agg.</i>	Rose, Dog, agg.		R	R				O	R	+	R
<i>Rubus armeniacus</i>	Bramble, Himalayan Giant*							R			
<i>Rubus fruticosus agg.</i>	Bramble			R					R	R	R

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<b>Scientific Name</b>	<b>Common Name</b>	WS inds (* /a/n/c/w/ft) & neg inds (-)	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR
<i>Rubus idaeus</i>	Raspberry								R		
<i>Rumex crispus</i>	Dock, Curled	- c/n/w	R	R	+	+					
<i>Rumex obtusifolius</i>	Dock, Broad-leaved	- c/n/w			+			R			
<i>Rumex sanguineus</i>	Dock, Wood			+					R		
<i>Salix alba</i>	Willow, White					+					
<i>Salix caprea</i>	Willow, Goat		+				+			+	+
<i>Sambucus nigra</i>	Elder						R				
<i>Schedonorus giganteus</i>	Fescue, Giant	*							+		
<i>Senecio erucifolius</i>	Ragwort, Hoary			R	R	R		R			
<i>Silene flos-cuculi</i>	Ragged Robin	f/w				R					
<i>Silene latifolia</i>	Campion, White							+			
<i>Sison amomum</i>	Parsley, Stone		R				R	+			
<i>Sorbus aucuparia</i>	Rowan / Mountain Ash									+	
<i>Stachys sylvatica</i>	Woundwort, Hedge				+		+	R		+	+
<i>Stellaria holostea</i>	Stitchwort, Greater								R	R	R
<i>Tamus communis</i>	Bryony, Black									+	
<i>Taraxacum officinale agg.</i>	Dandelion family					R	R				
<i>Thalictrum flavum</i>	Meadow-rue, Common	f/w				+					
<i>Tilia Sp</i>	Lime						+			+	
<i>Torilis japonica</i>	Parsley, Upright Hedge		+	R	R		R	R	R		
<i>Trifolium campestre</i>	Trefoil, Hop			R							
<i>Trifolium dubium</i>	Trefoil, Lesser		+		R						
<i>Trifolium pratense var. pratense</i>	Clover, Red (native)	c/n			R	R	+				
<i>Trifolium repens</i>	Clover, White	- a/c/n/w	R	R		R					
<i>Ulmus procera</i>	Elm, English								R	R	R
<i>Urtica dioica</i>	Nettle, Stinging	- a/c/n/w	R				R	F	+		R



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<b>Scientific Name</b>	<b>Common Name</b>	WS inds (* /a/n/c/w/f) & neg inds ('-')	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR	DAFOR
<i>Veronica chamaedrys</i>	Speedwell, Germander	c/n		R							s
<i>Vicia hirsuta</i>	Tare, Hairy			R							
<i>Vicia sativa subsp nigra</i>	Vetch, Common			R	+						
<i>Viola odorata</i>	Violet, Sweet									+	
<i>Viola reichenbachiana</i>	Violet, Early Dog	*							R		
*=planted/introduced/escape	<b>per compartment totals:</b>		<b>41</b>	<b>42</b>	<b>46</b>	<b>36</b>	<b>44</b>	<b>43</b>	<b>41</b>	<b>33</b>	<b>23</b>

Total species (all comp.s)		134		total indicators		39	
Comp1 - Grassland, grazed 21/08/2013	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	2	6	1	3	1	0	7
Comp2 -Grassland, mown 21/08/2013	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	1	5	1	3	0	0	5
Comp3 Grassland, calcareous 12/08/2013	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	1	13	0	16	0	0	18
Comp4 Grassland, Wet scrape 12/08/2013	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	0	11	1	8	5	3	15
Comp5 Woodland, Scrub 14/08/2013	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	2	4	0	3	0	0	4
Comp6 Grassland, Chalk Slope 12/08/2013	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	0	7	0	9	0	0	10
Comp7 Woodland, South 14/08/2013	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	8	1	0	1	0	0	1
Comp8 Woodland, East 14/08/2013	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	6	3	0	3	0	0	3
Comp9 Road edge 21/08/2013	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	7	1	0	1	0	0	1
All Compartments:	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	11	18	2	18	5	3	28
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
Criteria met	Met	Met		Met	Met		Met

#### 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

Areas on the chalk slope may have been sown in 1998, but extent uncertain. Most of the neutral grassland plants are probably native. The AWIs are likely to be native to the site colonising from the old hedgerows.

Photos:



P1



P2



P3



P4





P5



P6



P7



P8

