

Maple Lodge grassland

Hertfordshire Ecology Site Survey 16/6/2021 S Richards, M Hicks

Site description

The bulk of the site is open grassland established on largely undisturbed river valley soils, although a large area in the NE corner of the site has been previously subject to deposition of imported materials, now recently removed. The vegetation is influenced by shoals of gravel deposits which create drier, more acidic areas mixed with deeper organic soils providing more neutral grass dominated areas. This gives rise to a mosaic of grassland characterised by areas of rank, species-poor grassland interspersed with patches of more herb-rich neutral and acid communities.

Past Herts Ecology Surveys in the 1992 and 1996 identified a similar community, but the grassland was not considered to be sufficiently species-rich to represent a significant ecological interest, whilst Local Wildlife Site criteria had not been established at that time. However, this contrasted with the adjacent site which supported species-rich marshy grassland which was grazed in 1996, but has now developed into wet woodland through neglect.

The patchy nature of the grassland at Maple Lodge remains; its management over 20 years has broadly retained this character which may have increased its floristic interest in places, although surveys undertaken by numerous ecological consultants since have not identified a grassland of significant interest. Hertfordshire Ecology have relied upon these surveys and the original older surveys to assess the site, but have recently undertaken a field survey (June 2021) to update their own assessment given recent surveys have not been undertaken at optimal times of the year, and the recent claims made by local groups regarding the value of the grassland.

In summary Herts Ecology considers the grassland can be described thus:

- a) Overall, a general abundance of *Arrhenatherum elatius* gives the impression of rough rather species-poor grassland. In several areas – particularly to the north and west, *Arrhenatherum* does indeed become largely dominant giving rise to rank, species-poor communities.
- b) However, the site is far from homogeneous with many areas of more species-rich communities. Certain species appear consistent apart from the most rank areas, including *Stellaria graminea*, *Centaurea nigra*, *Rumex acetosa*, *Potentilla reptans*, *Festuca rubra* and to a lesser extent, *Holcus lanatus* and *Veronica chamaedrys*. *Lotus corniculatus* also occurs in distinct patches where it can be abundant, but is scattered elsewhere.
- c). Some area - notably in the middle of the site - are dominated by small but dense patches of *Rumex acetosella* with *Festuca ovina* or rarely *Luzula campestris*, reflecting drier, thinner and more acidic conditions, also reflected by areas of *Agrostis* sp.

d). Small damper areas to the south of the site support locally dominant *Filipendula ulmaria*, whilst a large damp fen area in the SW corner is dominated by *Carex* sp (identified variously as slender tufted-sedge *Carex acuta* (RPS in June 2017) and Lesser pond sedge *Carex acutiformis* (amec 2014)) with *Scrophularia auriculata*. There is also a small damp area along the eastern edge dominated by *Glyceria maxima* with *Phalaris arundinacea*.

e) Consequently, the majority of the grassland appears to be a relatively natural sward which does not appear to have been significantly degraded ecologically. However, its management over many years has been indifferent and this has led to development of a mosaic of generally species-poor grassland with some moderately species-rich areas which still retain a botanical interest reflecting a natural grassland community.

f) The areas of greater species diversity and acid grassland were not extensive enough or consistently species-rich enough to represent a priority grassland habitat. The site reflects the variable soil characteristics and supports associated characteristic grassland and 'fen' habitats but is still largely characterised by coarse species. However, the site has potential for ecological enhancement through appropriate management

g) A total of 13 Local Wildlife Site indicator species were found on site with ten associated with neutral grassland. These are sufficient in number to meet LWS status, but seven of these were largely if not only rare to occasional in abundance. This makes any such LWS status borderline. It is largely consistent with the early Herts Biological Records Centre surveys which identified what were subsequently to become 12 indicators in 1992 but with no recorded abundances, and 5 indicators following a hay cut in 1996, with largely similar species. Since then the site has been allocated for employment land. Subsequent surveys which informed the current development proposals have been quite variable but which have indicated a largely poor to moderate grassland interest.

h) The results of the HE survey shows a largely semi-natural grassland which has at least maintained its character over 25 years, supporting characteristic species such as black knapweed, lesser stitchwort and birds-foot trefoil and species of damper areas including meadowsweet and sedges. There are very small patches of acid grassland; other larger areas of moderately species-rich neutral grassland, and larger areas of rather species-poor neutral grassland. However, the general abundance and dominance of coarse grasses detract from the more valuable areas and indicate it is not a significantly high quality grassland overall.

i) Nevertheless, it appears to be of greater species diversity and interest than indicated in the ecological reports produced more recently. The results do accord better with the results of a survey carried out in 2017 although not all the species identified in that survey or an earlier 2014 survey were found in the current HE survey.

Species list

		DAFOR	Local Wildlife Site Indicators
<i>Agrostis capillaris</i>	Common bent	R-O	A,N,M
<i>Alopecurus pratensis</i>	Meadow fox tail	O	
<i>Arrhenatherum elatius</i>	False oat grass	A-D	
<i>Carex hirta</i>	Hairy sedge	R	
<i>Carex</i> sp	A 'narrow leaved sedge'	LD	
<i>Dactylis glomerata</i>	Cocksfoot	O-LF	
<i>Deschampsia cespitosa</i> subsp. <i>Cespitosa</i>	Tufted Hair-grass	R	
<i>Festuca ovina</i>	Sheeps fescue	LA	C,A,M
<i>Festuca rubra</i>	Red Fescue	F-A	
<i>Holcus lanatus</i>	Yorkshire fog	LA	
<i>Juncus conglomeratus</i>	Compact rush	R	
<i>Luzula campestris</i>	Field wood rush	R	A,N,M
<i>Poa trivialis</i>	Rough meadow grass	R-O	

<i>Achillea millefolium</i>	Yarrow	R-O	
<i>Centaurea nigra</i>	Black Knapweed	F	C,N,M
<i>Cerastium fontanum</i>	Mouse ear	R	
<i>Cirsium arvense</i>	Creeping thistle	O	
<i>Crepis capillaris</i>	Smooth hawks' beard	R	
<i>Dipsacus fullonum</i>	Teasel	R	
? <i>Epilobium hirsutum</i>	<i>Epilobium</i> sp	Great Willowherb	
<i>Filipendula ulmaria</i>	Meadow sweet	O-VLF	WM
<i>Galium aparine</i>	Cleavers	O	
<i>Geranium dissectum</i>	Cut-leaved Crane's-bill	F	
<i>Hypochaeris radicata</i>	Cat's-ear	R-LF	
<i>Lamium album</i>	White dead nettle	R-O	
<i>Lathyrus pratensis</i>	Meadow vetchling	R-VLF	N,M
<i>Lotus corniculatus</i>	Birds foot trefoil	LF-A	CNM
<i>Mycelis muralis</i>	Wall lettuce	R	
<i>Myosotis arvensis</i>	Forget me not	R	
<i>Pilosella officinarum</i>	Mouse-ear-hawkweed	VVLD	
<i>Potentilla reptans</i>	Creeping Cinquefoil	F	
<i>Ranunculus acris</i>	Meadow buttercup	R-O	N.M
<i>Ranunculus repens</i>	Creeping buttercup	O	
<i>Reseda lutea</i>	Wild mignonette	R	
<i>Rumex acetosa</i> subsp. <i>Acetosa</i>	Common sorrel	F	N,M
<i>Rumex acetosella</i>	Sheep's sorrel	VLD	AM
<i>Rumex</i> sp	Dock sp	O	

<i>Scrophularia auriculata</i>	Water figwort	R	
<i>Senecio jacobaea</i>	Common ragwort	O-LA	
<i>Silene dioica</i>	Red campion	R	
<i>Silene latifolia</i>	White campion	R	
<i>Sonchus asper</i>	Prickly sow-thistle	R	
<i>Stellaria graminea</i>	Lesser stitchwort	F-A	A,N,M
<i>Trifolium dubium</i>	Lesser trefoil	O	
<i>Trifolium repens</i>	White clover	R	
<i>Trifolium pratense</i>	Red clover	R	CNM
<i>Urtica dioica</i>	Nettle	LF	
<i>Veronica chamaedrys</i>	Germander speedwell	R-O	C,N,M
<i>Vicia sativa</i> subsp. <i>Segetalis</i>	Common vetch	R-O	
Total spp Nos		49	
LWS Indicator numbers: Neutral requires 8 Mixed requires 12			C=5 N=10 A=5 W=1 M=13

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