GOR4, Goring, Oxfordshire

Grassland Survey

June 2015



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1. Introduction

- 1.1 Ecoconsult Ltd has been commissioned by South Oxfordshire District Council to carry out a botanical survey for site GOR4 (see Figure 1) that has been 'shortlisted' as a potential housing site (max 15 dwellings) in South Oxfordshire District Council's 'Refined Options' document. The site is approximately 0.6ha.
- 1.2 In 2007, Dominic Lamb (SODC ecologist) surveyed this site and it was found to be a potential priority habitat. South Oxfordshire District Council has commissioned this survey as part of the evidence base for the emerging Local Plan 2031.
- 1.3 Potential priority habitats at the site include 'lowland calcareous grassland'.



Map provided by South Oxfordshire District Council

Figure 1: Location of GOR4

2. Methodology

- 2.1 The survey includes a NVC assessment of the grassland habitat and a list of higher plant species associated with the grassland.
- 2.2 The site was visited on 9th June 2015. Quadrat data was collected in seven locations from homogenous stands using 2 x 2 m quadrats (see Figure 2 below for locations).
 Plants were recorded with cover estimated using the DOMIN system.
- 2.3 A list of plants observed was made for the grassland and surrounding tall herb vegetation with abundance scores using the DAFOR scale (D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, L=Locally).





3. Results

Site description

3.1 The site is located in the northeast of Goring surrounded by residential properties and gardens to the north, south and west. To the east are grass fields with linear sections of woodland and hedgerows. The site is located at grid reference: SU 60803 81565.

NVC survey results

- 3.2 A table of sampled data is provided in Appendix A.
- 3.3 The majority of the surveyed area supports MG1 *Arrhenatheretum elatius* grassland and is characteristic of the MG1e *Centaurea nigra* sub-community (see Figure 3 for distribution). This grassland supports grasses including false oat-grass *Arrhenatherum elatius* and to a lesser extent cock's-foot *Dactylis glomerata* and Yorkshire fog *Holcus lanatus*. The community is indicative of lack of grazing.
- 3.4 A small section of the grassland measuring c. 0.035ha is located in the northeast of the site supports CG3 *Bromus erectus* grassland and is characteristic of the CG3b *Centaurea nigra* sub-community (see Figure 3). The sward is more species-rich than the MG1 *Arrhenatheretum elatius* grassland. This section of grassland is a UK Biodiversity Action Plan priority habitat *Lowland calcareous grassland*. Without management (ideally grazing), the sward will become further dominated by upright brome and eventually succeeding to scrub / woodland.



Figure 3: Distribution of NVC grassland communities within the site

4. Conclusions and recommendations

- 4.1 The grassland at the site is restricted in extent and surrounded by tall herb, scrub and trees.
- 4.2 The majority of the grassland supports NVC community MG1 *Arrhenatheretum elatioris* grassland MG1e *Centaurea nigra* sub-community. This grassland does not qualify as UK Biodiversity Action Plan priority habitat.
- 4.3 A small area of CG3 *Bromus erectus* grassland CG3b *Centaurea nigra* subcommunity is present in the northeast of the site. The grassland is a UK Biodiversity Action Plan priority habitat – *Lowland calcareous grassland*.
- 4.4 All of the grassland at the site is currently unmanaged and over time, without sympathetic management, will deteriorate and eventually succeed to scrub and woodland.
- 4.5 Additional habitats present on site include tall ruderal, scrub and planted woodland and trees. None of these qualify as UK Biodiversity Action Plan priority habitat.
- 4.6 The site is of importance to biodiversity locally. Development would result inb the loss of this biodiversity. The National Planning Policy Framework seeks to minimise impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity (NPPF paragraph 109). If this site is developed, loss of biodiversity could be achieved through a combination of on-site mitigation and off-site compensation (e.g. through biodiversity offsetting).
- 4.7 Protected species recorded during this survey included grass snake and slow worm.

Appendix A: Quadrat Data – Higher Plant DOMIN Scores

		2m x 2m quadrat number							
		1	2	3	4	5	6	7	
Scientific name	Common name								
Woody species									
Acer pseudoplatanus	Sycamore	1				1			
Fraxinus excelsior	Ash							1	
Monocot species					·				
Arrhenatherum elatius	False oat grass	4	5	5	5	4	3	3	
Brachypodium sylvaticum	Wood false-brome					1			
Bromopsis erectus	Upright brome						6	8	
Dactylis glomerata	Cock's-foot			1	1			1	
Festuca rubra agg.	Red fescue agg.	8	8	8	8	8	7	7	
Helictotrichon pubescens Downy oat-grass						2	3	4	
Holcus lanatus	Yorkshire fog	3							
Luzula campestris	Field woodrush	1		2	1		2	1	
Poa pratensis	Smooth meadow-grass				1	1			
Poa trivialis	Rough-stalked meadow-grass	4	3	1	4	3	3	2	
Trisetum flavescens	Yellow oat grass	3		1	2	1	3	4	
Dicot species									
Achillea millefolium Yarrow				1	1	1	1	2	
Aegopodium podagraria	Ground elder	1		1					
Agrimonia eupatoria Agrimony		1	2	2	2	3		3	

		2m x 2m quadrat number							
		1	2	3	4	5	6	7	
Anthriscus sylvestris	Cow parsley		1			2		1	
Centaurea nigra	Black knapweed				2		3		
Cerastium fontanum	Common mouse-ear	1			1				
Cirsium arvense	Creeping thistle	1	1			1			
Convolvulus arvensis	Field bindweed	2	3	3	2	2	2		
Galium mollugo	Hedge bedstraw	4	4	5	7	5	4	3	
Glechoma hederacea	Ground ivy					1			
Hypericum perforatum	Perforate St John's wort						2		
Lotus corniculatus	Common bird's-foot-trefoil						5	8	
Pastinaca sativa	Wild parsnip	4	2	1					
Plantago lanceolata	Ribwort plantain				1		3	3	
Plantago media	Hoary plantain							3	
Prunella vulgaris	Self-heal				1				
Ranunculus acris	Meadow buttercup						1		
Rumex acetosa	Common sorrel			1	3			2	
Senecio jacobaea	Common ragwort			1		1	1	1	
Trifolium pratense	Red clover						1	4	
Urtica dioica	Common nettle	1							
Veronica chamaedrys	Germander speedwell	3							
Vicia sativa	Common vetch							1	

Appendix B: Plant species recorded in grassland and tall herb areas

DAFOR scale (D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, L=Locally).

Plants recorded within grassland areas

Scientific name	Common name	DAFOR Scale					
		D	Α	F	0	R	
Acer pseudoplatanus	Sycamore					R	
Achillea millefolium	Yarrow				0		
Aegopodium podagraria	Ground elder		LA				
Agrimonia eupatoria	Agrimony			F			
Anthriscus sylvestris	Cow parsley			LF			
Arrhenatherum elatius	False oat grass		LA				
Brachypodium sylvaticum	Wood false-brome					R	
Bromopsis erectus	Upright brome		LA				
Centaurea nigra	Black knapweed			LF			
Centaurea scabiosa	Greater knapweed				0		
Cerastium fontanum	Common mouse-ear				0		
Cirsium arvense	Creeping thistle				0		
Convolvulus arvensis	Field bindweed			F			
Dactylis glomerata	Cock's-foot				0		
Festuca rubra agg.	Red fescue agg.		Α				
Fraxinus excelsior	Ash					R	
Galium mollugo	Hedge bedstraw		Α				
Glechoma hederacea	Ground ivy					R	
Helictotrichon pubescens	Downy oat-grass			LF			
Holcus lanatus	Yorkshire fog				0		
Hypericum perforatum	Perforate St John's wort				0		
Lathyrus pratensis	Meadow vetchling					R	
Leucanthemum vulgare	Oxeye daisy					R	
Lotus corniculatus	Common bird's-foot-trefoil		LA				
Luzula campestris	Field woodrush				0		
Medicago lupulina	Black medick					R	
Ononis repens	Restharrow					R	
Pastinaca sativa	Wild parsnip			LF			
Plantago lanceolata	Ribwort plantain			LF			
Plantago media	Hoary plantain				0		
Poa pratensis	Smooth meadow-grass				0		
Poa trivialis	Rough-stalked meadow-grass			F			
Primula vulgaris	Primrose					R	
Prunella vulgaris	Self-heal					R	
Prunus spinosa	Blackthorn	1				R	
Ranunculus acris	Meadow buttercup		1			R	
Rumex acetosa	Common sorrel		1	LF			

Scientific name	Common name	DAFOR Scale						
		D	Α	F	0	R		
Senecio jacobaea	Common ragwort				0			
Trifolium pratense	Red clover			LF				
Trisetum flavescens	Yellow oat grass			F				
Urtica dioica	Common nettle				0			
Veronica chamaedrys	Germander speedwell			LF				
Vicia sativa	Common vetch				0			

Tall ruderal habitat along edges of grassland

Scientific name	Common name		DAFOR Scale						
		D	Α	F	0	R			
Aegopodium podagraria	Ground elder		Α						
Anthriscus sylvestris	Cow parsley		LA						
Arrhenatherum elatius	False oat grass		Α						
Carex divulsa divulsa	Grey sedge					R			
Centaurea scabiosa	Greater knapweed				0				
Cirsium arvense	Creeping thistle				0				
Dactylis glomerata	Cock's-foot				0				
Festuca rubra agg.	Red fescue agg.			LF					
Galium aparine	Cleavers				0				
Galium mollugo	Hedge bedstraw				0				
Holcus lanatus	Yorkshire fog				0				
Poa trivialis	Rough-stalked meadow-grass				0				
Urtica dioica	Common nettle				0				
Veronica chamaedrys Germander speedwell					0				