

Title	Botany assessment of the Grassland Component of Little Barford CWS								
Date	01 September 2021								
Client	Executors of the Alington Estate								
Site	Alington Estate								
Author									
Review									

Introduction

This note was requested to provide the following:

A written advice note analysing the differences in the core of the CWS (its designation criteria) and the area potentially proposed for residential development on the field between Lower Farm Barns and St Deny's Church.

The report therefore provides the results of the botany survey of the semi-improved neutral grassland field located between Lower Farm Barns and St Deny's Church and designated as part of the Little Barford Country Wildlife Site (CWS).

The survey also covered the small section of accessible wetland habitat adjacent to the river but excluded the wet woodland and adjacent grazed field to the south of the access track to the Church. A plan of the Little Barford CWS is provided in **Annex 1** and the two survey area compartments shown in **Annex 2**, along with a Phase 1 habitat survey plan.

Methods

The fenced grassland field between St Deny's Church and Lower Farm Barns was a single survey compartment. A second smaller compartment adjacent to the river with wetter habitats was also surveyed.

A botany survey of the two survey areas within the CWS was carried out by experienced botanist Sven Wair on 19 June 2021. The survey identified all higher plants within the two survey areas by eye and hand lens and with reference to Stace (2010). Where necessary, specimens were collected and later identified at home using a microscope and with reference to other literature.

CWS Criteria

The criteria for neutral grasslands taken from Bedfordshire and Luton Local Sites Partnership (2020) are as follows:

- c) Neutral grassland sites supporting good populations of either:
 - three or more strong neutral grassland indicator species;
 - eight or more neutral grassland indicator species in total.

Also, a separate criterion for grassland assemblages:

e) Sites supporting good populations of more than 50 grassland species.

Results

The results of the botany survey provided in **Annex 3** demonstrate that the grassland field located between Lower Farm and St Deny's Church supports a neutral grassland assemblage and small area of wet flush.

The total number of grassland species exceeded the 50 species CWS selection threshold for neutral grassland and, at nine neutral grassland indicator species, also met the indicator species selection threshold of eight species. There were no 'strong' neutral grassland indicator species present as listed in the CWS selection guidelines Bedfordshire and Luton Local Sites Partnership (2020). The data suggest that the grassland and flush does not support any rare or notable flora but that the assemblage has remained sufficiently diverse since designation to merit continued CWS status.

The small area of wetland adjacent to the river and within the CWS boundary supported a small area of *Phragmites australis* (common reed) and it and the adjacent wet woodland added to the habitat mosaic and hence is considered to enhance the value of the overall CWS area.

Conclusions

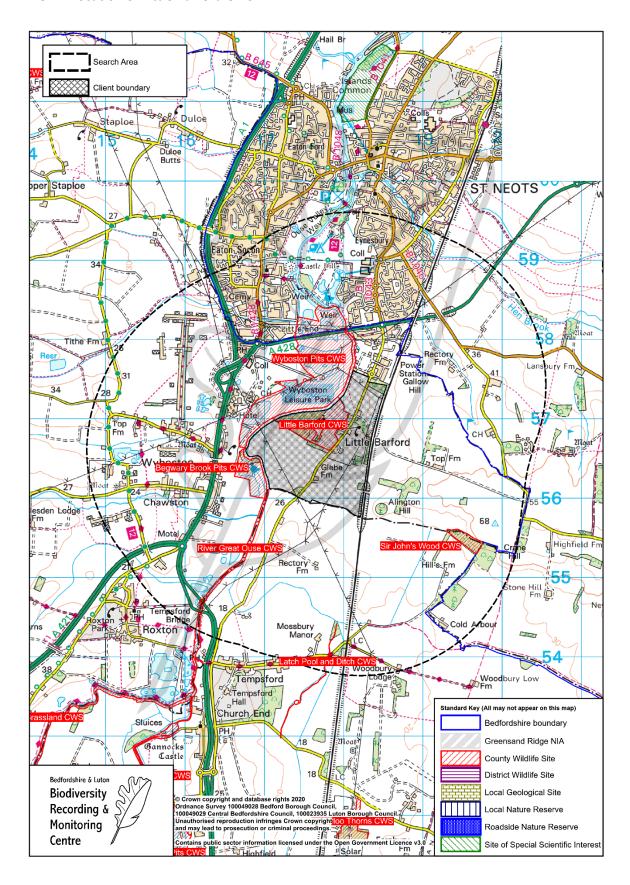
The botany survey of the grassland sections of Little Barford CWS indicates that the grassland meets the CWS selection criteria and hence the designation remains valid. The CWS should be retained and protected in line with local planning policy (Bedford Local Plan 2030). Development provides the opportunity to contribute to and secure the continued management of the CWS, which may over time enhance the grassland habitats through a programme of meadow management.

References

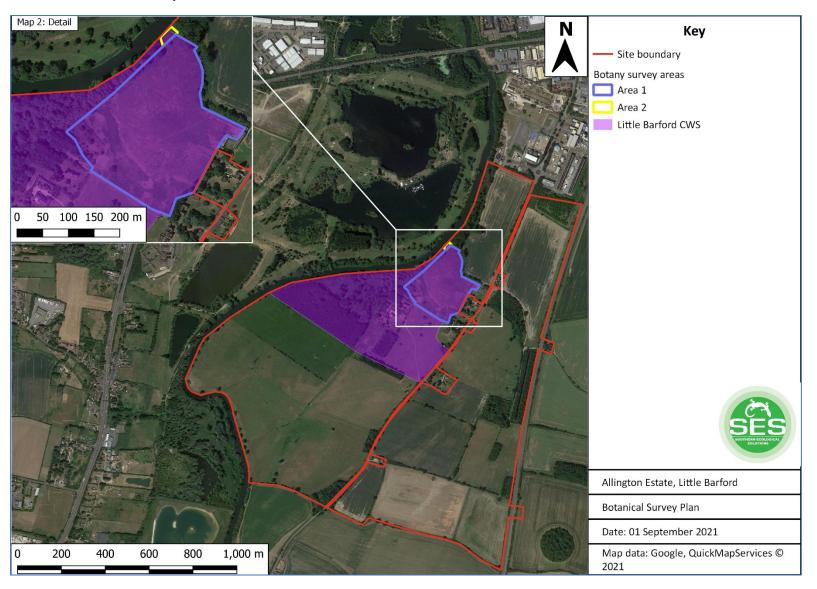
Bedford Borough Local Plan 2030. Online at: https://www.bedford.gov.uk/planning-and-building/planning-policy-its-purpose/local-plan/

Bedfordshire and Luton Local Sites Partnership (2020). *Bedfordshire and Luton County Wildlife Sites Selection Guidelines, Version 14, December 2020.* Accessed online at: https://www.bedscape.org.uk/BRMC/newsite/index.php?c=sites_cws

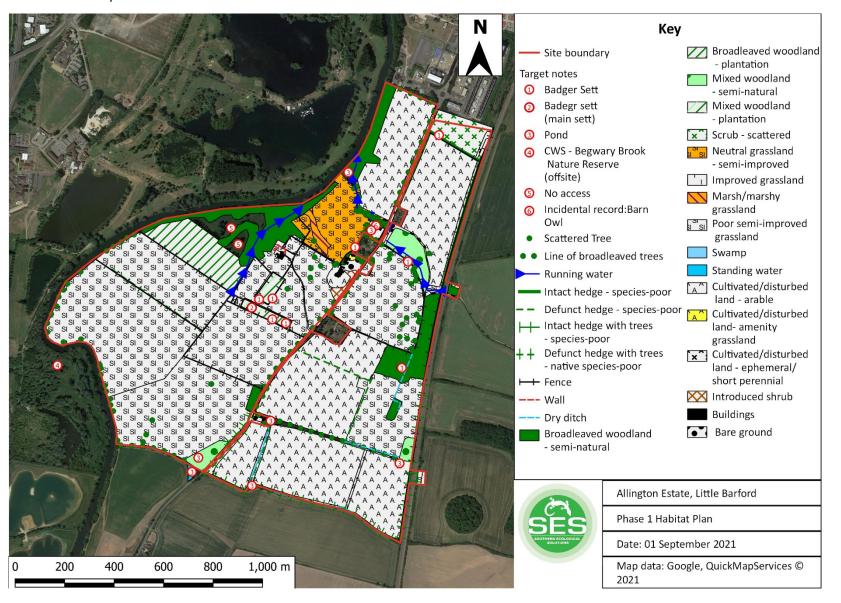
Annex 1: Location of Little Barford CWS



Annex 2: Location of Survey Area



Phase 1 habitat plan



Annex 3: Botany Survey June 2021 Results

Taxon	Vernacular	Status	Main Field	Small Area by River	CWS Indicator	Grassland Sp.	Notes
Acer pseudoplatanus	Sycamore	Established	0				
Aesculus carnea	Red Horse-chestnut	Planted	R				
Agrostis capillaris	Common Bent	Native	F			1	
Alopecurus pratensis	Meadow Foxtail	Native	F	0		1	
Anagallis arvensis subsp. arvensis	Scarlet Pimpernel	Native	0			1	
Angelica sylvestris	Wild Angelica	Native		F		1	
Anisantha sterilis	Barren Brome	Native	F			1	
Anthriscus sylvestris	Cow Parsley	Native	F			1	
Aphanes arvensis	Parsley-piert	Native	0			1	
Arenaria serpyllifolia	Thyme-leaved Sandwort	Native	F			1	
Arrhenatherum elatius	False Oat-Grass	Native	Α	Α		1	
Bromus hordeaceus subsp. hordeaceus	Common Soft-brome	Native	А			1	
Calystegia sepium	Hedge Bindweed	Native		0			
Carduus crispus	Welted Thistle	Native	0			1	
Carex hirta	Hairy Sedge	Native	F		1	1	
Carex riparia	Greater Pond-sedge	Native		Α			
Cerastium fontanum subsp. vulgare	Common Mouse-ear	Native	0			1	
Cerastium glomeratum	Sticky Mouse-ear	Native	F			1	
Cirsium arvense	Creeping Thistle	Native	F	F		1	
Cirsium vulgare	Spear Thistle	Native	0	F		1	
Convolvulus arvensis	Field Bindweed	Native	F			1	
Crataegus heterophylla	Various-leaved Hawthorn	Established		R		1	
Crepis capillaris	Smooth Hawk's-beard	Native	0			1	
Crepis vesicaria	Beaked Hawk's-beard	Native	F			1	
Cynosurus cristatus	Crested Dog's-tail	Native	F			1	
Dactylis glomerata	Cock's-foot	Native	Α	Α		1	

Taxon	Vernacular	Status	Main Field	Small Area by River	CWS Indicator	Grassland Sp.	Notes
Dipsacus fullonum	Wild Teasel	Native	0			1	
Epilobium hirsutum	Great Willowherb	Native	0			1	
Festuca rubra subsp. rubra	Red Fescue	Native	Α	F		1	
Filago vulgaris	Common Cudweed	Native	0			1	
Fraxinus excelsior	Ash	Native	0	0			
Galium aparine	Cleavers	Native	F			1	
Galium verum	Lady's Bedstraw	Native	F		1	1	
Geranium dissectum	Cut-leaved Crane's-bill	Native	F			1	
Geranium molle	Dove's-foot Crane's-bill	Native	0			1	
Geranium pusillum	Small-flowered Crane's- bill	Native	0			1	
Glechoma hederacea	Ground-ivy	Native	0	Α		1	
Helminthotheca echioides	Bristly Oxtongue	Native	0			1	
Heracleum sphondylium	Hogweed	Native	F			1	
Holcus lanatus	Yorkshire-fog	Native	А	F		1	
Hordeum murinum	Wall Barley	Native	F			1	
Hordeum secalinum	Meadow Barley	Native		0	1	1	
Hypochaeris radicata	Cat's-ear	Native	F			1	
llex aquifolium	Holly	Native	0				
Juncus inflexus	Hard Rush	Native	0			1	
Lamium album	White Dead-nettle	Native	0			1	
Lolium perenne	Perennial Rye-grass	Native	Α			1	
Luzula sp.	Wood-rush sp.	Native	F		1	1	Either L. campestris or L. multiflora
Medicago lupulina	Black Medick	Native	F			1	
Myosotis arvensis	Field Forget-me-not	Native	0			1	
Ophrys apifera	Bee Orchid	Native	0		1	1	x10 spikes at TL17905691
Phleum pratense	Timothy	Native	0			1	
Phragmites australis	Common Reed	Native		А			

Taxon	Vernacular	Status	Main Field	Small Area by River	CWS Indicator	Grassland Sp.	Notes
Pilosella officinarum subsp. officinarum	Mouse-ear Hawkweed	Native	F		1	1	
Plantago lanceolata	Ribwort Plantain	Native	F			1	
Plantago major subsp. intermedia	Greater Plantain	Native	0			1	
Poa annua	Annual Meadow-grass	Native	0			1	
Poa humilis	Spreading Meadow-grass	Native	F			1	
Poa trivialis	Rough Meadow-grass	Native	Α			1	
Potentilla anserina	Silverweed	Native	0	F		1	
Potentilla reptans	Creeping Cinquefoil	Native	F			1	
Prunus spinosa	Blackthorn	Native	0				
Ranunculus acris	Meadow Buttercup	Native	0	0		1	
Ranunculus repens	Creeping Buttercup	Native	F			1	
Rubus fruticosus agg.	Bramble	Native	0				
Rumex acetosa	Common Sorrel	Native	F		1	1	
Rumex crispus	Curled Dock	Native	0			1	
Rumex obtusifolius	Broad-leaved Dock	Native	0			1	
Sagina procumbens	Procumbent Pearlwort	Native	0			1	
Sambucus nigra	Elder	Native	0				
Scorzoneroides autumnalis	Autumn Hawkbit	Native	0			1	
Senecio erucifolius	Hoary Ragwort	Native	F		1	1	
Senecio jacobaea	Common Ragwort	Native	0	F		1	
Senecio vulgaris	Groundsel	Native	0			1	
Silene dioica	Red Campion	Native	0			1	
Silene latifolia	White Campion	Native	0			1	
Solanum dulcamara	Bittersweet	Native		F			
Sonchus asper	Prickly Sow-thistle	Native	0				
Stellaria graminea	Lesser Stitchwort	Native	0	F	1	1	
Taraxacum agg.	Dandelion	Native	0			1	
Trifolium dubium	Lesser Trefoil	Native	F			1	

Taxon	Vernacular	Status	Main Field	Small Area by River	CWS Indicator	Grassland Sp.	Notes
Trifolium repens	White Clover	Native	0			1	
Trifolium striatum	Knotted Clover	Native	0			1	
Urtica dioica	Common Nettle	Native	F	Α			
Verbascum thapsus	Great Mullein	Native	0			1	
Veronica agrestis	Green Field-speedwell	Native	0			1	
Veronica arvensis	Wall Speedwell	Native	0			1	
Veronica chamaedrys	Germander Speedwell	Native	0			1	
Total					9	75	

Annex 4: Site Photographs

