

**ECOLOGICAL ASSESSMENT OF GRASSLAND AT
SHURLOCK ROAD, WALTHAM ST LAWRENCE,
BERKSHIRE**

**DOLPHIN ECOLOGICAL SURVEYS
JUNE 2012**

**On behalf of
The Royal Borough of Windsor & Maidenhead**



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SUMMARY

The Shurlock Road grassland site, owned by the Royal Borough of Windsor and Maidenhead (RBWM), is part of a Wildlife Heritage Site/Local Wildlife Site and comprises an area of largely unimproved, herb-rich grassland of high biodiversity importance.

The site is unsuitable to use as a Jubilee Woodland site because it supports a habitat of high existing ecological interest that would be lost as a result of woodland creation.

However, the site has very good potential to become a Field in Trust (www.fieldsintrust.org) and with appropriate management could become an excellent community asset that is also of great value to wildlife.

1.0 Background

This ecological assessment of an area of grassland adjoining Shurlock Road to the south of Waltham St Lawrence in Berkshire was commissioned by RBWM in order to provide information about the ecological quality of the grassland and its potential suitability as a site to plant a Jubilee Woodland.

The assessment consisted of a walkover survey during which vascular plant species were recorded. Observations on the vegetation present, its structure and its condition were made and an annotated map of the site was prepared.

The survey was carried out on 6th June 2012 in warm, part sunny, part showery weather conditions by Kate Ryland BSc, CEnv, MIEEM, of Dolphin Ecological Surveys.

The survey took place on a single day so it is inevitably subject to seasonal bias. The species list given in section 5.0 below will not be exhaustive, but it is nevertheless likely to include the majority of the plant species present in the grassland sward.

The grassland area that was surveyed and which is owned by RBWM, together with an adjoining area in separate ownership, has been designated by Thames Valley Environmental Record Centre (TVERC) as a Wildlife Heritage Site (now known as a Local Wildlife Site). This is a county level, non-statutory designation which recognises sites of biodiversity importance.

The site is referred to by TVERC as Wet Meadow WHS, Waltham St Lawrence. Its Site Code is SU87103. Survey data for the WHS from 2007 was provided to Dolphin Ecological Surveys by the Woodland Trust.

2.0 Site Description

2.1 Grassland

The c.6ha of grassland that was included in this survey comprises the southern and eastern sections of a 9.5ha field that lies to the east of Shurlock Road in Waltham St Lawrence at central grid reference SU838762.

The entire field is bounded by mature, largely unmanaged hedgerows and the two parts of grassland are separated by a fence (see map).



Part of the area surveyed showing fence dividing the two sections of the field

Within the area surveyed the grassland sward is very diverse with a total of 68 plant species recorded. There are marshy areas with some standing water as well as drier zones in the field. The sward varied in height from less than 5cm to approximately 30cm. Rabbit grazing is responsible to some extent for the shorter sward in parts of the site.

The grassland supports a very high proportion of herbaceous species to grasses in most areas. A herb-rich sward is characteristic of those unimproved and semi-improved grassland habitats that are of highest nature conservation value.

Grasses prominent in the sward include crested dogs-tail, meadow foxtail, rough meadow-grass, red fescue, sweet vernal grass and meadow barley.

Amongst the many wildflower species present, some of the most prominent include common knapweed, meadow vetchling, birds-foot-trefoils, clovers, common sorrel, buttercups, lesser stitchwort, fleabane and creeping cinquefoil.

Of particular interest is the presence of pepper-saxifrage in many parts of the site. This plant and a few of the other species present (notably cowslip, grass vetchling and hoary ragwort) are usually associated with grasslands that have been subject to little agricultural improvement and which have a long history of uninterrupted grassland management.

The north-eastern section of the site has the most obviously unimproved sward with especially frequent pepper-saxifrage. There were also occasional plants of cowslip and agrimony in this area, species which were not observed elsewhere in the site.

Wet flushes and marshy areas are marked by characteristic wet grassland plants such as hard rush, soft rush, sedges, marsh foxtail, floating sweet-grass, silverweed, creeping Jenny and occasionally meadowsweet and ragged robin.



A marshy area in the east of the field

The whole of the field appears to have been grazed by horses until quite recently but in June 2012 only the northern section of the WHS grassland, which is outside RBWM ownership, had horses present.

The impacts of horse grazing on the sward are evident in places, especially in the west of the site, where the ground is quite poached and creeping buttercup is locally dominant. Patches of creeping thistle are also present in the most heavily poached and least species-rich part of the site in the west.



Poached area with less species-rich sward in the west of the site

The sward is beginning to show some early signs of under-management, such as bramble and woody seedlings becoming established. In the long term, lack of management or inappropriate management is a serious threat to this type of herb-rich grassland habitat and one of the major causes of loss of unimproved grassland nationally.

2.2 Ditch

There is a ditch along the eastern site boundary which has a gappy and overgrown hedgerow on its far side and a mound of earth parallel to the ditch within the field.



View of the ditch showing wetland flora

The ditch is shaded in places but supports a good range of wetland species including common bulrush, greater pond sedge, fools watercress, gipsywort, water mint and common water plantain.



Tall coarse vegetation on the mound

The mound or bund of earth that runs parallel to the ditch is dominated by coarse, tall herbs and grasses typical of disturbed ground including hemlock, docks, hogweed, hedge bindweed, teasel, bramble, nettle, false oat-grass and common cleavers.

2.3 Hedgerows

The hedgerows that surround the site to the south, west and east contain a variety of trees and shrubs including oak, ash, field maple, blackthorn, hawthorn and willows.



Dense hedgerow – a valuable field edge habitat

In places the boundary hedgerows are gappy, especially on the eastern edge, but elsewhere they are dense and tall, providing excellent edge habitat around the grassland.



Field maple stools on old bank, also showing poaching from horses

The southern hedgerow grows on an old bank, which is visible in the southwest where the shrubs are more sparse and old field maple coppice stools occur.

3.0 Suitability as a Jubilee Woodland Site

The 2007 survey data for the Wet Meadow WHS includes some areas outside the current survey boundary, however, it is clear that the site is little changed from that time and continues to support a sizeable expanse of diverse, largely unimproved, herb-rich grassland habitat.

Unimproved and herb-rich lowland meadows are a national Biodiversity Action Plan (BAP) priority habitat. There were massive losses of wildflower meadows in the second half of the 20th century with more than 95% of the resource believed to be lost due to a combination of factors including changes in farming practices, altered land-use, neglect and urban development.

The Shurlock Road grassland is not only ecologically important for its component wildflowers, grasses, rushes and sedges but also for its potential to support a variety of invertebrates such as bumblebees, butterflies, moths, beetles and spiders.

The grassland is also likely to provide good habitat for small mammals, such as voles, mice and shrews as well as their predators, including birds of prey such as kestrels, red kites and owls and larger mammals such as foxes. Reptiles and amphibians will potentially find good foraging and breeding habitat in the combination of grassland, wetland and hedgerow habitats on the site. Bats are also likely to find good feeding opportunities over the field and along the hedgerows.

The edge habitat or “ecotone” between the grassland and the hedgerows can be an especially good area for fauna such as invertebrates, small mammals and reptiles.

Planting woodland on this area of herb-rich meadow is not recommended since it would replace scarce, very difficult to recreate unimproved grassland habitat with secondary woodland, which is easy to create and generally of much lower wildlife value, eventually resulting in a loss of biodiversity.

4.0 Recommendations

Unimproved lowland grassland of the type found on this site is a nationally declining habitat of high biodiversity value. It is vitally important that such grassland is managed appropriately to conserve and enhance its key features.

As far as possible the grassland should be managed in a way that mimics the traditional hay meadow regime, which would have involved an annual hay cut followed by a period of grazing by livestock.

There are likely to be some constraints to management of the site but there are many sources of information and help to enable the Local Authority to make the most of this excellent asset.

The site has very good potential for combined community use, education and biodiversity conservation, perhaps as a Field in Trust rather than as a Jubilee Woodland.

Consideration could be given to small scale habitat creation, for example a pond could be installed with no loss of meadow species adjacent to the ditch where there is already some disturbed ground.

A circular path could be mown around the meadow to enhance public access and allow people to enjoy the sights and sounds of a flowery grassland buzzing with insects.

It would also be possible to plant a small orchard of heritage variety fruit trees in the western part of the field where the grassland is semi-improved and has a rather less diverse sward.

Organisations which could offer RBWM help and advice on grassland conservation and management include:

- The Grassland Trust www.grassland-trust.org
- Thames Valley Environmental Record Centre www.tverc.org
- Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust
www.bbowt.org.uk/wildlife/habitats/lowland-meadows
- Plantlife www.plantlife.org.uk
- Flora Locale www.floralocale.org

5.0 Plant Species Recorded

Abundance of plants observed is given on the DAFOR scale:

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare and L = Locally, P = Present

Latin name	English name	Grassland	Hedges/edges	Ditch
<i>Acer campestre</i>	Field maple		P	
<i>Agrimonia eupatoria</i>	Agrimony	OLF		
<i>Agrostis stolonifera</i>	Creeping bent-grass	FLA		
<i>Alisma plantago-aquatica</i>	Common water-plantain			P
<i>Alopecurus geniculatus</i>	Marsh foxtail	FLA		
<i>Alopecurus pratensis</i>	Meadow foxtail	A		
<i>Anthoxanthum odoratum</i>	Sweet vernal grass	FLA		
<i>Anthriscus sylvestris</i>	Cow parsley		P	
<i>Apium nodiflorum</i>	Fools watercress			P
<i>Arrhenatherum elatius</i>	False oat-grass	LA	P	
<i>Calystegia sepium</i>	Hedge bindweed		P	
<i>Cardamine pratensis</i>	Cuckoo flower	OLF		
<i>Carex flacca</i>	Glaucous sedge	OLF		
<i>Carex hirta</i>	Hairy sedge	O		
<i>Carex otrubae</i>	False fox-sedge	R		P
<i>Carex ovalis</i>	Oval sedge	OLF		
<i>Carex riparia</i>	Greater pond sedge			P
<i>Carex sp.</i>	Sedge sp.	OLF		
<i>Carex spicata</i>	Spiked sedge	OLF		
<i>Centaurea nigra</i>	Common knapweed	A		
<i>Cerastium fontanum</i>	Common mouse-ear	F		
<i>Cirsium arvense</i>	Creeping thistle	OLF		
<i>Cirsium vulgare</i>	Spear thistle	R		
<i>Conium maculatum</i>	Hemlock		P	
<i>Crataegus monogyna</i>	Hawthorn		P	
<i>Cynosurus cristatus</i>	Crested dog's-tail	FLA		
<i>Dactylis glomerata</i>	Cocksfoot	OLF		
<i>Deschampsia cespitosa</i>	Tufted hair-grass	O		
<i>Dipsacus fullonum</i>	Teasel		P	
<i>Epilobium hirsutum</i>	Great willowherb		P	
<i>Festuca arundinacea</i>	Tall fescue	OLF		
<i>Festuca pratensis</i>	Meadow fescue	O		
<i>Festuca rubra</i>	Red fescue	A		
<i>Filipendula ulmaria</i>	Meadowsweet	OLA		
<i>Fraxinus excelsior</i>	Ash		P	
<i>Galium aparine</i>	Common cleavers		P	
<i>Galium palustre</i>	Common marsh bedstraw	R		
<i>Geranium dissectum</i>	Cut-leaved cranesbill		P	
<i>Glyceria fluitans</i>	Floating sweet-grass			P

Latin name	English name	Grassland	Hedges/edges	Ditch
<i>Heracleum sphondylium</i>	Hogweed		P	
<i>Holcus lanatus</i>	Yorkshire fog	F		
<i>Hordeum secalinum</i>	Meadow barley	FLA		
<i>Juncus effusus</i>	Soft rush	OLF		P
<i>Juncus inflexus</i>	Hard rush	F		
<i>Lathyrus nissolia</i>	Grass vetchling	O		
<i>Lathyrus pratensis</i>	Meadow vetchling	A		
<i>Leucanthemum vulgare</i>	Ox-eye daisy	LF		
<i>Lolium perenne</i>	Perennial rye grass	OLF		
<i>Lotus corniculatus</i>	Common birds-foot-trefoil	FLA		
<i>Lotus pedunculatus</i>	Greater birds-foot-trefoil	F		
<i>Luzula campestris</i>	Field wood-rush	OLF		
<i>Lychnis flos-cuculi</i>	Ragged robin	O		
<i>Lycopus europaeus</i>	Gipsywort			P
<i>Lysimachia nummularia</i>	Creeping Jenny	F		
<i>Medicago lupulina</i>	Black medick	R		
<i>Mentha aquatic</i>	Water mint			P
<i>Myosotis arvensis</i>	Field forget-me-not			P
<i>Persicaria maculosa</i>	Redshank	O		
<i>Picris echioides</i>	Bristly ox-tongue	R		
<i>Plantago lanceolata</i>	Ribwort plantain	O		
<i>Plantago major</i>	Greater plantain	RLO		
<i>Poa annua</i>	Annual meadow grass	OLF		
<i>Poa trivialis</i>	Rough meadow grass	A		
<i>Potentilla anserine</i>	Silverweed	OLF		
<i>Potentilla reptans</i>	Creeping cinquefoil	A		
<i>Primula veris</i>	Cowslip	R		
<i>Prunella vulgaris</i>	Selfheal	O		
<i>Prunus spinosa</i>	Blackthorn		P	
<i>Pulicaria dysenterica</i>	Fleabane	F		
<i>Quercus robur</i>	Pedunculate oak		P	
<i>Ranunculus acris</i>	Meadow buttercup	A		
<i>Ranunculus repens</i>	Creeping buttercup	A		
<i>Rosa canina</i>	Dog rose		P	
<i>Rubus fruticosus</i>	Bramble		P	
<i>Rumex acetosa</i>	Common sorrel	F		
<i>Rumex crispus</i>	Curled dock	O		
<i>Rumex obtusifolius</i>	Broad-leaved dock	R		
<i>Salix caprea</i>	Goat willow		P	
<i>Salix cinerea</i>	Grey willow		P	
<i>Senecio erucifolius</i>	Hoary ragwort	O		
<i>Senecio jacobaea</i>	Common ragwort	R		
<i>Silaum silaus</i>	Pepper saxifrage	OLF		
<i>Sison amomum</i>	Stone parsley		P	

Latin name	English name	Grassland	Hedges/edges	Ditch
<i>Solanum dulcamara</i>	Bittersweet			P
<i>Stachys sylvatica</i>	Hedge woundwort		P	
<i>Stellaria graminea</i>	Lesser stitchwort	F		
<i>Taraxacum agg.</i>	Dandelion	O		
<i>Trifolium dubium</i>	Lesser trefoil	R		
<i>Trifolium pratense</i>	Red clover	FLA		
<i>Trifolium repens</i>	White clover	FLA		
<i>Typha latifolia</i>	Common bulrush			P
<i>Ulmus agg.</i>	Elm		P	
<i>Urtica dioica</i>	Nettle		P	
<i>Veronica chamaedrys</i>	Germander speedwell	R		
<i>Veronica serpyllifolia</i>	Thyme-leaved speedwell	R		
<i>Vicia cracca</i>	Tufted vetch	OLF		
<i>Vicia sativa</i>	Common vetch	O		
<i>Vicia tetrasperma</i>	Smooth tare	OLF		
TOTAL NUMBER OF GRASSLAND SPECIES		68		

Shurlock Road Grassland Sketch Map



— Area surveyed (land owned by RBWM)

— Wildlife Heritage Site/Local Wildlife Site