

**Survey Report for: Rectory Lane Cemetery (St. Peter's Churchyard (detached))**

<b>Central grid ref:</b>	SP 994 075	<b>Site size:</b>	3.275 acres		
<b>Surveyor:</b>	Andrew Harris				
<b>Date of survey:</b>	13/10/2014	<b>Weather:</b>	Overcast/light shower	<b>Duration on site:</b>	3 hours

<b>Geology:</b>	<b>Bedrock:</b>	Lewes nodular chalk formation			
	<b>Superficial Deposits:</b>				

<b>Overall General Site Description:</b>	<p>A burial ground on the north-east facing slope in the centre of Berkhamstead with grassland and scattered broad-leaved trees and conifers.</p> <p>The grassland ranges from mainly False Oat-grass <i>Arrhenatherum elatius</i> with Red Fescue <i>Festuca rubra</i> Cock's-foot <i>Dactylis glomerata</i> and Common Bent <i>Agrostis capillaris</i> in the southern (upper) part of the site to more regularly mown grassland mainly of Red Fescue and Perennial Rye <i>Lolium perenne</i> in the lower more regularly mown grassland to the north of the site.</p> <p>Herbs include Germander Speedwell <i>Veronica chamaedrys</i> which is widespread across the site as well as scattered patches of Red Clover <i>Trifolium pratense</i>, Cuckooflower <i>Cardamine pratensis</i> and Ox-eye Daisy <i>Leucanthemum vulgare</i>. There are several other herbs in the more heavily mown areas though these are typically lawn species such as White Clover <i>Trifolium repens</i>, Self-heal <i>Prunella vulgaris</i>, Yarrow <i>Achillea millefolium</i> and Slender Speedwell <i>Veronica filiformis</i>.</p> <p>Trees and bushes include some native broad-leaved species such as Ash <i>Fraxinus excelsior</i> and Holly <i>Ilex aquifolium</i> and there is a hedge of mixed broad-leaved species on the southern boundary of the site. Much of the rest of the perimeter is walled with some Wall-rue <i>Asplenium ruta-muraria</i> and Ivy-leaved Toadflax <i>Cymbalaria muralis</i> has colonised the mortar courses.</p> <p>The northern grassland has some large anthills of the Yellow Meadow Ant <i>Lasius flavus</i></p>
<b>Compartment 1</b>  1842 graveyard Northern area (north of terrace and archway)	<p>Short mown part shaded grassland: Mainly Red Fescue <i>Festuca rubra</i> and Perennial Rye <i>Lolium perenne</i> with a small amount of Yorkshire Fog <i>Holcus lanatus</i>, Cock's-foot <i>Dactylis glomerata</i>. Herbs are represented mainly by species adapted to or tolerant of 'lawn conditions' and the species with the highest cover being the negative indicators Creeping Buttercup <i>Ranunculus repens</i> and White Clover <i>Trifolium repens</i> and with rosettes of Daisy <i>Bellis perennis</i> also being numerous. Among a variety of other species present the most widespread are Germander Speedwell <i>Veronica chamaedrys</i> Self Heal <i>Prunella vulgaris</i>, Daisy <i>Bellis perennis</i>, Smooth Hawk's-beard <i>Crepis capillaris</i>, Red Clover <i>Trifolium pratense</i> and Slender Speedwell <i>Veronica filiformis</i>. Occurring in more localised patches are Yarrow <i>Achillea millefolium</i> Cuckooflower <i>Cardamine pratensis</i> and Ox-eye Daisy <i>Leucanthemum vulgare</i></p>

<p><b>Compartment 2</b></p> <p>1894 and 1921 graveyards (area north of terrace and archway)</p>	<p>These two sections of the graveyard have been treated together as their floral composition is generally similar (though the 1894 area is somewhat intermediate between the rough grassland at the top of the slope and mown area of the 1894).</p> <p>Taller grassland: Rather grass dominated with False Oat-grass <i>Arrhenatherum elatius</i>, Red Fescue <i>Festuca rubra</i>, Cock's-foot <i>Dactylis glomerata</i>, Common Bent <i>Agrostis capillaris</i> and Creeping Bent <i>Agrostis stolonifera</i>. There are only a few herbs in any quantity, but three species are widespread: Germander Speedwell <i>Veronica chamaedrys</i>, Dandelion <i>Taraxacum officinale</i> and Wood Avens <i>Geum urbanum</i>. The grassland is fairly uniform across this part of the site, though Ivy <i>Hedera helix</i> and Cow Parsley <i>Anthriscus sylvestris</i> occur in the shadier sides.</p> <p>Pathways are similar in composition to the well mown areas in the northern part of the site but have Field Wood-rush <i>Luzula campestris</i> as an additional, albeit very localised species.</p>
<p><b>Compartment 3</b></p> <p>Marginal areas</p>	<p>Bramble <i>Rubus fruticosus</i> and Ivy <i>Hedera helix</i> with Wood Avens <i>Geum urbanum</i> with a small area with Stinging Nettle <i>Urtica dioica</i> Creeping Thistle <i>Cirsium arvense</i>, Lesser Burdock <i>Arctium minus</i> and other ruderals</p> <p>These area though rather rough and ruderal potentially good for butterflies and other invertebrates, providing nectar sources and larval food plants.</p> <p>For convenience, Wall rue <i>Asplenium ruta-muraria</i> and Ivy-leaved Toadflax <i>Cymbalaria muralis</i> which occurred on the boundary wall are included here.</p>
<p><b>Trees and shrubs</b></p>	<p>This list concentrates on native and naturalised non native species and is not a comprehensive record of all the planted trees: does not include a full list of non-native sp. In also includes a hedgerow of mixed species with several natives including Ash <i>Fraxinus excelsior</i>, Hawthorn <i>Crataegus monogyna</i>, Elm <i>Ulmus sp</i></p>

<p><b>Fauna:</b></p>	<p><b>Birds:</b></p>	<p>Robin, Magpie and House Sparrow</p>
	<p><b>Mammals:</b></p>	
	<p><b>Invertebrates:</b></p>	<p>Yellow Meadow Ant</p>
<p><b>Other species:</b></p>	<p><b>Bryophytes:</b></p>	<p>Mosses include <i>Rhytidiadelphus squarrosus</i> and <i>Pseudoscleropodium purum</i> which are a significant component of the grassland in some areas</p>
	<p><b>Lichens</b></p>	<p>Already surveyed in 2014</p>
<p><b>Invasive species:</b></p>	<p>The garden Oxalis though this seems confined to a shady corner</p>	
<p><b>Current Management:</b></p>		

<p><b>Recommended Management:</b></p>	<p>The following are management suggestions based on improving the ecological value of the site only and may have to be assessed and modified to take into account other requirements such as health and safety etc. Management will inevitably be a bit of a compromise</p> <p><b>In general:</b> The balance between trees and open areas is probably about right, as the trees as well as having aesthetic value and creating structure, shelter and variety in the habitat also support lichens, mosses and the invertebrates that depend upon them and encourage birds to the site. However some of the areas are quite dark so there does not want to be any more shade. Continue to control Laurel and young Sycamore. Any Ash that is removed should be kept on site as a precaution against Ash die-back.</p> <p>Caution is advised with any sowing of wild flowers. The appearance of the vegetation suggests that this is old semi-natural grassland probably derived from the pasture visible in the C19th view reproduced in the Friends of St Peter's publication. Therefore the introduction of species (though these may be desirable plants would not easily colonise) would detract from the natural colonisation and evolution of this grassland as a habitat representative of local soils climate and local genetic make-up of plants.</p> <p>One possible exception might be Yellow Rattle <i>Rhinanthus minor</i> as a management tool as being hemiparasitic (i.e. it photosynthesises but takes nutrients from the roots of other plants) it would reduce the vigour of the grasses and yield from them, but as any introductions might compromise any future attainment of Wildlife Site Status it is suggested that further advice is sought from HMWT before this is considered.</p> <p><b>The lower mown area (1842 graveyard)</b> It is suggested that a small Spring Meadow is created along the bottom margin until the Cuckooflower has flowered. A range of herbs survive in the grass though it is short but might be harmed if it was cut too short during times of drought.</p> <p><b>The upper area</b> Suggest a late summer cut removing as much as the cuttings as possible to reduce nutrients and create more opportunity to herbs to seed and encourage biodiversity. An early spring cut for a couple of years could further reduce the vigour of the grasses. However there is a bit of a compromise here between having the grass fairly tussocky as it is at the moment as shelter and habitat for invertebrates and reducing its dominance in favour of wild flowers.</p> <p>As this area is roughly similar throughout the creation of a Garden of Remembrance in part of this area should not compromise the grassland in general</p> <p><b>The margins</b> Maintain the small areas of bramble and Stinging Nettle in contained areas along the margins as they provide nectar sources shelter and food plants for invertebrates.</p> <p><b>The boundary wall</b> If any maintenance is necessary try to protect the wall rue</p>
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	<p><b>Lichens:</b></p> <p>This has already been mentioned in an earlier report. The main thing is a good balance between trees which cast shade but are good for bark species and open areas where lichen can flourish on sunny memorials. There may be some impact of vegetation growing tall around the bases of memorials but as elsewhere it is being kept short in practice there should be no problem. The main thing is to keep the memorials free of ivy and deep shade and this is already taking place</p>
<b>Further survey suggestions:</b>	<p>A visit in Spring and a comprehensive re-survey in late Spring/summer are advised to gain a more comprehensive assessment of species and the composition of the vegetation and to ascertain whether the site meets Wildlife Site Criteria.</p> <p>Note: During this survey six neutral grassland indicators were recorded <i>Agrostis capillaris</i>, <i>Cardamine pratensis</i>, <i>Leucanthemum vulgare</i>, <i>Luzula campestris</i>, <i>Trifolium pratense</i> and <i>Veronica chamaedrys</i>. This does not presently meet neutral grassland criteria which would need eight.</p> <p>Possibly think of fixed quadrats as a way of monitoring management</p>

<b>Surrounding land use :</b>	Urban
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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.	
<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>Including these herbs: 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>Including herbs: White Clover, Creeping Buttercup;</p> <p>Grasses: 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>

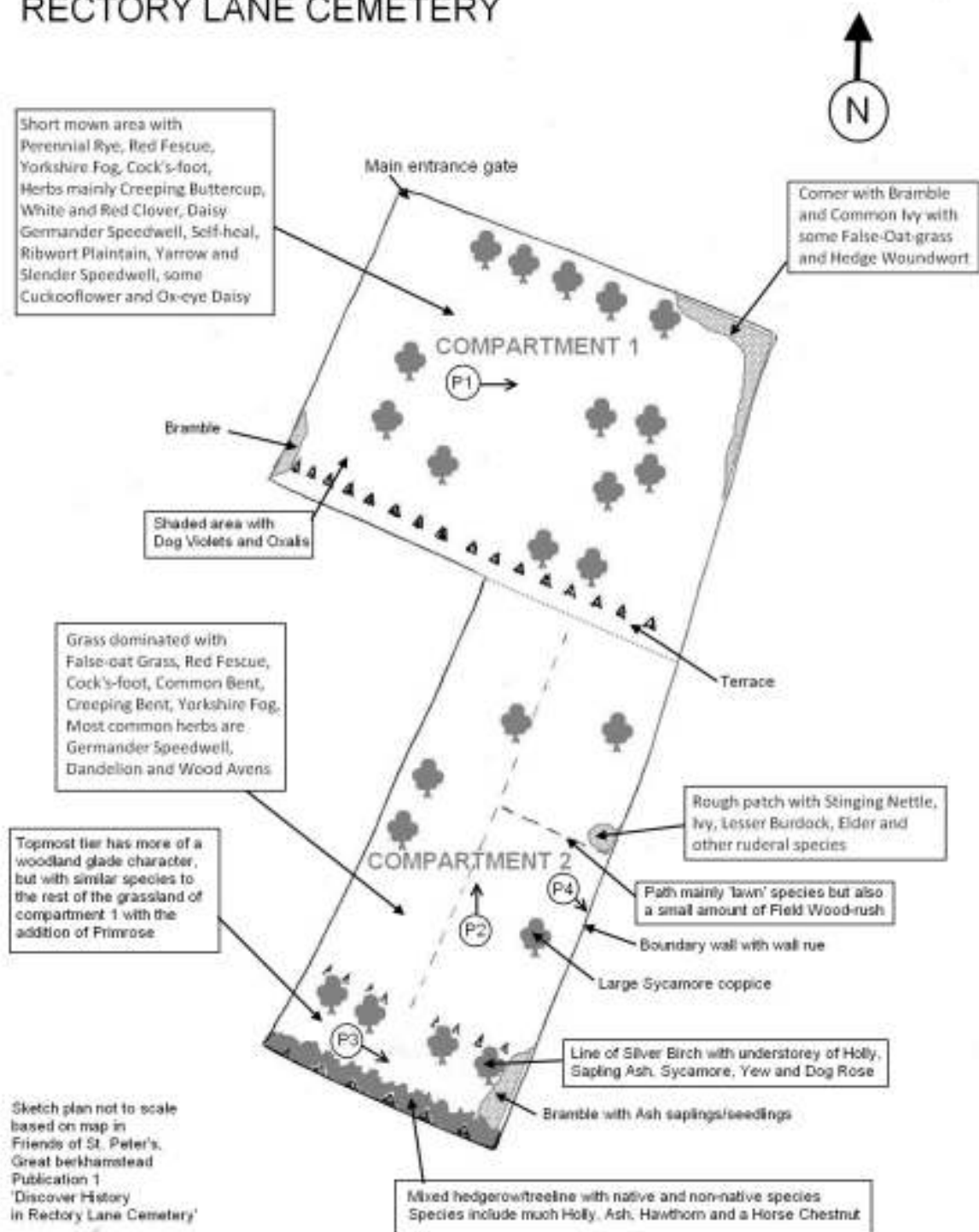
<b>Rectory Lane Cemetery, 13/10/2014, Andrew Harris</b>		WS inds (*a/n/c/w/f) & neg inds (-)	Comp1: 1842 graveyard	Comp2: 1894 and 1921 graveyard	Comp3: Marginal bramble and ruderal	Trees and shrubs	all inds	no of comps total
<b>Scientific Name</b>	<b>Common Name</b>		DAFOR	DAFOR	DAFOR	DAFOR		
<i>Acer pseudoplatanus</i>	Sycamore				F	R		2
<i>Achillea millefolium</i>	Yarrow		R					1
<i>Aesculus hippocastanum</i>	Chestnut, Horse*				R-	R-		2
<i>Agrostis capillaries</i>	Bent, Common	a/n		R+			x	1
<i>Agrostis stolonifera</i>	Bent, Creeping			R				1
<i>Anthriscus sylvestris</i>	Parsley, Cow	- c/n/w	R	R				2
<i>Arctium minus</i>	Burdock, Lesser				R-			1

<i>Arrhenatherum elatius</i>	Oat-grass, False	- a/c/n/w	R	F	R			3
<i>Asplenium ruta-muraria</i>	Wall-rue (in boundary wall)				R			1
<i>Bellis perennis</i>	Daisy	- a/c	O-					1
<i>Betula pendula</i>	Birch, Silver* (prob. planted)					R		1
<i>Buxus sempervirens</i>	Box* (planted)					R-		1
<i>Cardamine pratensis</i>	Cuckoo-flower	n/w	R				x	1
<i>Carex divulsa</i>	Sedge, Grey		R	R-				2
<i>Cerastium fontanum</i>	Mouse-ear, Common	- a	R-					1
<i>Cirsium arvense</i>	Thistle, Creeping	- a/c/n/w			R-			1
<i>Cirsium vulgare</i>	Thistle, Spear	- a/c/n/w	R-	R-				2
<i>Corylus avellana</i>	Hazel	*		R-			x	1
<i>Cotoneaster sp.</i>	Cotoneaster sp.*				R-			1
<i>Crataegus monogyna</i>	Hawthorn					R		1
<i>Crepis capillaries</i>	Hawk's-beard, Smooth		R+	R-				2
<i>Cymbalaria muralis</i>	Toadflax, Ivy-leaved (Boundary wall)			R-				1
<i>Dactylis glomerata</i>	Cocksfoot	- a/c/n/w	R	R+				2
<i>Deschampsia cespitosa</i>	Hair-grass, Tufted	- n/w		R-				1
<i>Elytrigia repens</i>	Couch, Common			R				1
<i>Epilobium montanum</i>	Willowherb, Broad-leaved			R-				1
<i>Epilobium tetragonum</i>	Willowherb, Sq-stemmed			R-				1
<i>Festuca rubra agg.</i>	Fescue, Red (family)		F	F				2
<i>Fraxinus excelsior</i>	Ash			R		R+		2
<i>Galium aparine</i>	Cleavers	- c/n		R				1
<i>Geranium molle</i>	Crane's-bill, Dove's-foot		R-					1
<i>Geranium robertianum</i>	Herb Robert		R	R				2
<i>Geum urbanum</i>	Wood Avens		R	R				2
<i>Glechoma hederacea</i>	Ground Ivy		R					1
<i>Hedera helix</i>	Ivy		R	R	F			3
<i>Holcus lanatus</i>	Yorkshire Fog	- a/c/n/w	R+	R				2
<i>Hordeum murinum</i>	Barley, Wall		R					1
<i>Hypochaeris radicata</i>	Cat's-ear, Common		R					1
<i>Ilex aquifolium</i>	Holly	*				R+	x	1
<i>Leucanthemum vulgare</i>	Daisy, Oxeye	c/n	R				x	1
<i>Ligustrum ovalis</i>	Privet, Garden*					R		1
<i>Lolium perenne</i>	Rye-grass, Perennial	- a/c/n/w	F	R				2
<i>Luzula campestris</i>	Wood-rush, Field	a/n		R			x	1
<i>Oxalis sp.</i>	Oxalis, garden escape*		R					1
<i>Pilosella aurantiaca</i>	Fox-and-cubs		R					1
<i>Plantago lanceolata</i>	Plantain, Ribwort		R	R				2
<i>Plantago major</i>	Plantain, Greater	- a/c/n	R					1
<i>Poa annua</i>	Meadow-grass, Annual		R					1
<i>Primula vulgaris</i>	Primrose	*		R			x	1
<i>Prunella vulgaris</i>	Selfheal		R+					1
<i>Prunus laurocerasus</i>	Laurel, Cherry					R-		1
<i>Quercus robur</i>	Oak, Pedunculate					R-		1

<i>Ranunculus repens</i>	Buttercup, Creeping	- w	F	R				2
<i>Rosa canina</i> agg.	Rose, Dog, agg.					R-		1
<i>Rubus fruticosus</i> agg.	Bramble		R	R	A			3
<i>Rumex obtusifolius</i>	Dock, Broad-leaved	- c/n/w	R	R				2
<i>Rumex sanguineus</i>	Dock, Wood		R					1
<i>Sambucus nigra</i>	Elder					R		1
<i>Scorzonoides autumnalis</i>	Hawkbit, Autumn		R-					1
<i>Senecio erucifolius</i>	Ragwort, Hoary			R-				1
<i>Senecio jacobaea</i>	Ragwort, Common	- a/c/n	R					1
<i>Solanum dulcamara</i>	Bittersweet			R-				1
<i>Sonchus asper</i>	Sow-thistle, Prickly			R-				1
<i>Stachys sylvatica</i>	Woundwort, Hedge		R-		R			2
<i>Stellaria media</i>	Chickweed		R					1
<i>Taraxacum officinale</i> agg.	Dandelion family		R	R+				2
<i>Taxus baccata</i>	Yew* (planted)					O-		1
<i>Trifolium pratense</i> var. <i>pratense</i>	Clover, Red (native)	c/n	R				x	1
<i>Trifolium repens</i>	Clover, White	- a/c/n/w	F	R				2
<i>Urtica dioica</i>	Nettle, Stinging	- a/c/n/w			O			1
<i>Veronica chamaedrys</i>	Speedwell, Germander	c/n	R+	O			x	2
<i>Veronica filiformis</i>	Speedwell, Slender		R					1
<i>Viola</i> sp.	Violet, Dog		R-					1
*= <i>planted/introduced/escape</i>		<b>per compartment totals:</b>		41	33	12	12	

Total species (all compartments)	73	total indicators			9			
	AWI (H.1)	Neut (H.2.2b)	Acid (H.2.2c)	Calc (H.2.2a)	Wet (H.2.2d)	Fen (H.5.3)	c/a/n/w (H.2.2e)	
<b>Comp1: 1842 graveyard</b>	0	4	0	3	1	0	4	
<b>Comp2: 1894 and 1921 graveyard</b>	2	3	2	1	0	0	3	
<b>Comp3: Marginal bramble and ruderal</b>	0	0	0	0	0	0	0	
<b>Trees and shrubs</b>	1	0	0	0	0	0	0	
<b>All Compartments:</b>	3	6	2	3	1	0	6	
<b>Thresholds:</b>	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w	
min size (ha)	1	0.25	0.25	0.25	0.25	0.25	0.25	
min indicators	10	8	5	8	5	5	12	
<b>Criteria met</b>								

# RECTORY LANE CEMETERY







P1 – The lower part of the cemetery (1842 graveyard)



P2 – The upper part of the site (1921 graveyard) showing anthills





The uppermost part of the site showing the mixed species hedgerow



P4 – Part of the boundary wall with Wall Rue and lichens

**Appendix: DAFOR scale**

D	Dominant	>75% cover
A	Abundant	51-75% cover
F	Frequent	26-50% cover
O	Occasional (high)	11-25% cover
O-	Occasional (low)	6-10% cover
R+	Rare (high)	1-5% cover
R	Rare	>5 individual plants up to 1% cover
+	Very Rare	<5 individual plants