

Scraftoft Local Nature Reserve

Site visit by Sue Timms and Karen Headley

Leicestershire and Rutland Environmental Record Centre
Leicestershire County Council

Date of survey: 18th May 2017
Time on site: c.2 hours
Grid reference: SK647061
Site area: 14.33ha

SUMMARY

Little of the site has changed significantly in quality since the previous survey of 1999 that was used to inform the LNR declaration of 2002. The north-eastern part of the site has declined, due to over-grazing by horses, but aerial photo evidence suggests this is less than in previous years. The rest of the grassland is not over-grazed, and has a similar species composition and habitat description to that recorded in 1999, and the scrub does not appear to have changed. There is still some informal use by the public.

The main value of the site is as a habitat-mosaic. Grassland quality is patchy, but parts are herb-rich although not species-rich.

With the exception of the north-eastern part, the site meets current Local Wildlife Site criteria for scrub-grassland habitat mosaics.

1. Background

The purpose of the site visit was to assess the ecological condition of the LNR in light of a proposal by Harborough DC to 'de-declare' it as an LNR to allow development. It was declared in 2002.

The site is owned by Leicester City Council, and was surveyed by Sue Timms in 1999 when she worked for the City. These survey results were used to inform the LNR declaration in 2002.

The site was a 2nd World War military camp, and there are the remains of concrete structures still visible on site, although mostly grassed or scrubbed over. The belts of scrub (see 2.4 below) seem to correspond with the lines of buildings in the camp, which extended beyond the LNR; parts have been lost under the golf-course to north and west.

2. Appearance, topography and use

- 2.1 The site is being grazed by c.20 horses plus foals, which are free to roam throughout the site. The eastern end on higher ground towards Beeby Rd is closely grazed dry grassland; in this area the grassland is overgrazed, resulting in thin grass cover, some bare ground and clumps of nettles, thistles and ragwort. Hawthorn, Elder, Rose and Blackberry scrub is scattered in the south-eastern area; the north-eastern area (on the highest ground towards the golf-course) has little scrub.

- 2.2 There are attractive views from Beeby Road across the site towards the City and the site itself is a pleasant place, with sheltered grassy 'glades' within the scrub.
 - 2.3 The ground falls away to the south and west towards a small brook, little more than a ditch, along the southern boundary – the 'Scraptoft Brook'. In the SW corner of the LNR is a muddy, poached pond, which (after a dry Spring) had low water levels.
 - 2.4 Three broad belts of dense mature Hawthorn/Ash/Elder scrub run obliquely across the western part of the site, corresponding to former buildings on the site. The western parts of the scrub are developing into woodland. The scrub is used as shelter by the horses and is networked by paths.
 - 2.5 The grassland is damper, lusher and more herb- and species-rich to south and west, and is not over-grazed; it forms a tight short turf but there is little bare ground. Between the scrub belts are broad bands of grassland with scattered scrub, strongly marked by 'ridge and furrow' running N-S. Presumably this pre-dates the wartime use and survived this disruption. This grassland is not overgrazed, but is cropped short.
 - 2.6 There are signs of informal public use and children's play along the southern and western parts, with occasional dens, paths and evidence of blackberry-picking in season. Signs of anti-social behaviour were not seen.
 - 2.7 The site has chain-link fencing with scattered scrub (the beginnings of a hedge) to the newer golf-course within the 'L'. There is a hedge/tree belt to the more established golf course to the west. Back gardens of houses abut the site to the south, with a range of fencing/hedges and occasional access gates. There is a partial hedge and scrub along Beeby Road to the east, with a ramshackle fence, and the main access gate to the site is along here. There is also a small brick building (purpose unknown) along Beeby Rd.
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3. Habitats

- 2.1 The site is an excellent habitat mosaic of scrub and grassland, with many sheltered grassy 'glades' within the scrub. It is likely to be of value to invertebrates and birdlife; however, apart from incidental sightings, these species groups were not surveyed. Chiffchaff, Great-tit, Chaffinch, Jackdaw, Song-thrush, Starling, Wood-pigeon and Green Woodpecker were noted, plus a newly emerged damselfly (not identified) near the pond, and a small tortoiseshell butterfly. The site would repay further faunal survey.
- 2.2 The scrub belts are developing into woodland towards the west. They are dominated by Hawthorn, with occasional Ash growing through, plus Elder, Blackberry and occasional Sallow. Some of the Hawthorns are large. Ground cover in the scrub is sparse, with occasional Ground-ivy, Cuckoo Pint, Herb Bennet, Ivy, Black Bryony, Hedge Woundwort and (rarely) Red Champion recorded. The main value of the scrub is as bird nesting and feeding habitat, and a habitat for invertebrates.
- 2.3 The grassland across the site is patchy in quality and in herb-richness. There are areas of high herb-richness but it is difficult to identify these specifically as they are scattered across the site. We felt that the better grassland was to the south and west, towards the brook and pond, in and around the scattered scrub in the centre of the site, and in the southern band of grassland between two of the scrub belts – see map at Appendix 3. This grassland is not over-grazed. Within this broad area there is also grassland of lower quality and richness. The north-eastern grassland, where there is no scrub and there is overgrazing, is relatively poor.

- 2.4 Although parts of the grassland are extremely herb-rich (i.e. with a high proportion of broad-leaved wild-flowers to grasses present) it is not particularly species-rich (i.e. there is a fairly limited range of species present.) Bulbous Buttercup is frequent throughout, and there are frequent large patches of Lady's Bedstraw. Creeping Cinquefoil and Hairy Sedge are extremely common. Bird's-foot Trefoil, Red Clover, Meadow Buttercup, Sorrel, Field Woodrush, Common Cat's-ear, Yarrow, Germander Speedwell, Self-heal and Parsley Piert are occasional to locally frequent; Agrimony was present along the south-eastern boundary and Lady's Smock and a Rush rarely found in damper areas. It is possible that species have been missed, as this is a complex and diverse site in terms of vegetation and habitat structure, with a lot of pockets of grassland that were not surveyed fully.
- 2.5 Tall herbs are common throughout the site, especially in the overgrazed parts towards the north-east. Ragwort and Creeping Thistle are frequent throughout, Curled and Broad-leaved dock are occasional. Clumps of nettle are frequent in the overgrazed north-eastern part, but over the rest of the site this species was mainly associated with the scrubland.
- 2.6 The pond was trampled and churned up by horses; some Brooklime, Great Hairy Willowherb, a Rush (either Jointed or Sharp-flowered) and a Horsetail were present. The banks down to the pond were close-cropped but herb-rich.
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3. Assessment of current value and changes since the previous survey

- 3.1 A combined species list from 2017 and 1999 with notes is at Appendix 4. The previous survey notes ('Field off Beeby Rd', S. Timms, Leicester City Council, September 1999) are at Appendix 3.
- 3.2 The site has changed in management; in 1999 it was described as under-grazed by a small herd of cattle, but probably having been overgrazed and then neglected in the past. As with this current survey, tall herbs (Ragwort, thistles, etc.) were noted as frequent. Scrub is at about the same level as 1999 - see aerial photos in Appendix 1 – and so is informal use by the public. The grassland was described in 1999 as *'variable in quality due to past grazing regimes. Some areas have been damaged by overgrazing and poaching, and are now dominated by tall herbs. However, there are still areas of herb-rich grassland, although the actual diversity of species is fairly low'*. This is still the case today.
- 3.3 Earlier aerial photos from 2000 and 2006 (see Appendix 1) show clear signs of overgrazing in the NE corner, with much bare ground, probably reflecting the underlying wartime structures. The yellow on the 2000 photo is probably Ragwort. The 2011 aerials were flown in late summer/early autumn, and seem to indicate some recovery from the overgrazing as the grassland cover in this NE area is reasonable. A more recent snip from Google Earth (unknown date) shows that overgrazing in this NE part is happening again, but is not as bad as previously.
- 3.4 Grassland species recorded in 1999 and 2017 are similar; in 1999, Knapweed, Hay Rattle and Hard Rush were recorded, plus various grasses not recorded in 2017; this may reflect loss of species, or may be due to time of year for survey or the difference in grazing pressure. Additional species recorded in 2017 are Bulbous Buttercup, Lady's Smock and Field Woodrush, and this is likely to be due to time of year; these species disappear by late summer.
- 3.5 The pond has changed significantly from 1999, when it was described as *'a silted up field pond in the extreme south-west corner, colonised by large stands of greater willowherb.'*

- 3.6 In many ways the field has not changed significantly, and certainly has not suffered serious decline in nature conservation value since the 1999 survey and the LNR declaration. The habitat mosaic is still the same, many of the grassland species are still present, and the habitat descriptions are largely the same. The exception is the pond (a minor habitat) and the area to the north-east which is now significantly over-grazed; this is a loss of quality. However, the rest of the grassland is not over-grazed and there is no evidence of decline in this area.
- 3.7 The field was not assessed under Local Wildlife Site criteria in 1999, as these were not finalised until 2001 (note that the term used then was Site of Importance for Nature Conservation, but the designation is the same). The evidence from the 1999 survey is that it would have met the 2001 criteria, as a habitat mosaic of herb-rich grassland and scrub. Eight grassland indicator species were present (highlighted in the appended species-list), meeting secondary grassland habitat criteria, and there is c. 4ha of scrub present in association with c. 10ha of grassland, again meeting secondary habitat criteria. An additional feature may have been its community value, but the evidence for this is not recorded in detail.
- 3.8 The criteria have been revised since 2001, but are fundamentally the same. Most of the site would meet current Local Wildlife Site criteria as a habitat mosaic. The scrub and grassland elements both meet the secondary grassland criteria, apart from the over-grazed NE grassland.
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References:

LL&R SINC Panel. 2001. *Guidelines for the selection of Sites of Importance for Nature Conservation in Leicester, Leicestershire and Rutland.* Leics County Council

LL&R LWS Panel. 2011. *Guidelines for the selection of Local Wildlife Sites (previously known as Sites of Importance for Nature Conservation or SINCS) in Leicester, Leicestershire and Rutland.* Leics County Council

Timms S. 1999. *Fields at Scraftoft: nature conservation.* Unpublished report for Leicester City Council, archived by L&R Environmental Records Centre (1500Z-112)

Appendices:

1. Aerial photos: 2000 and 2011, plus a snip from Google Earth – more recent, but undated.
 2. Grassland quality map
 3. Extract from 'Fields at Scraftoft' - 1999 survey report
 4. Species lists: 1999 and 2017
 5. Boundary of candidate Local Wildlife Site
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Sue Timms, LRERC, May 19th 2017

Appendix 1: Aerial photos

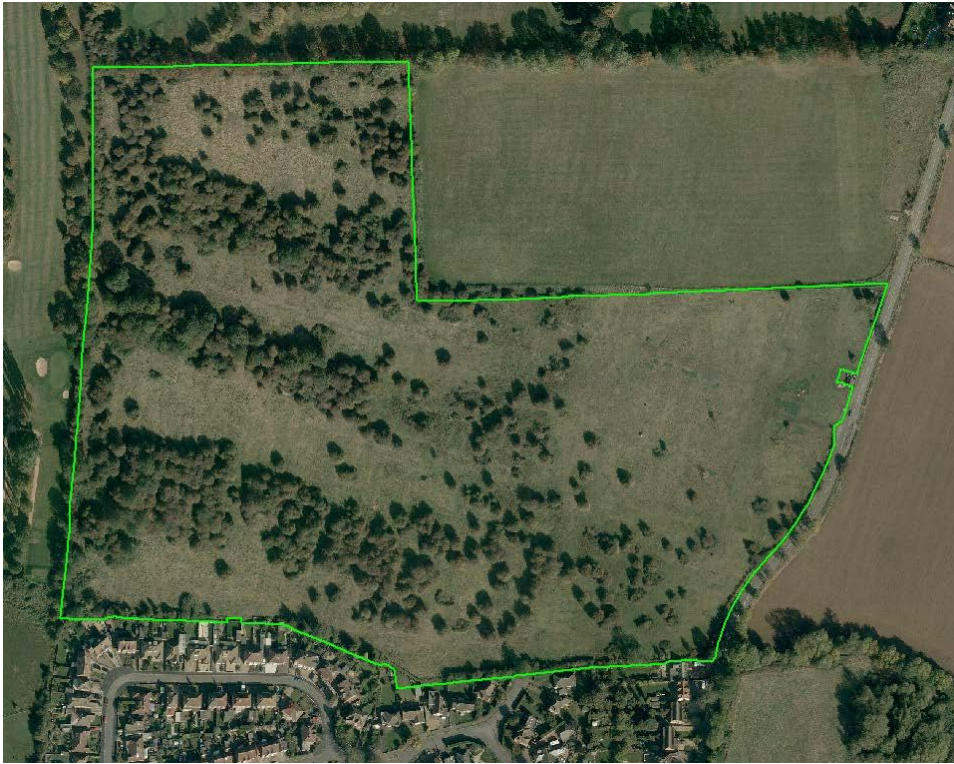
2000



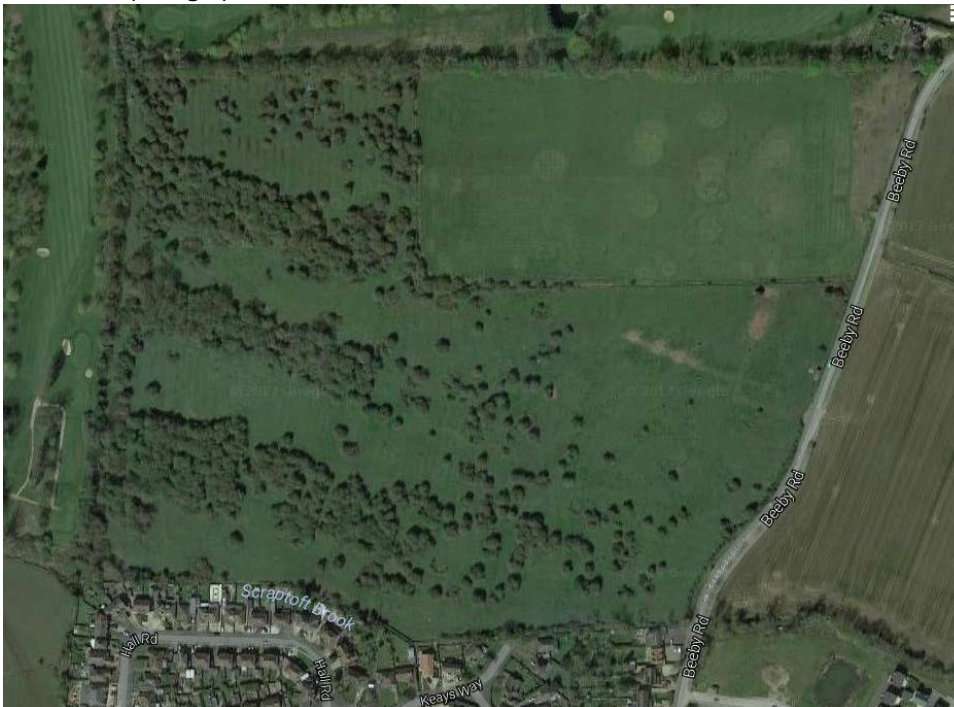
2006



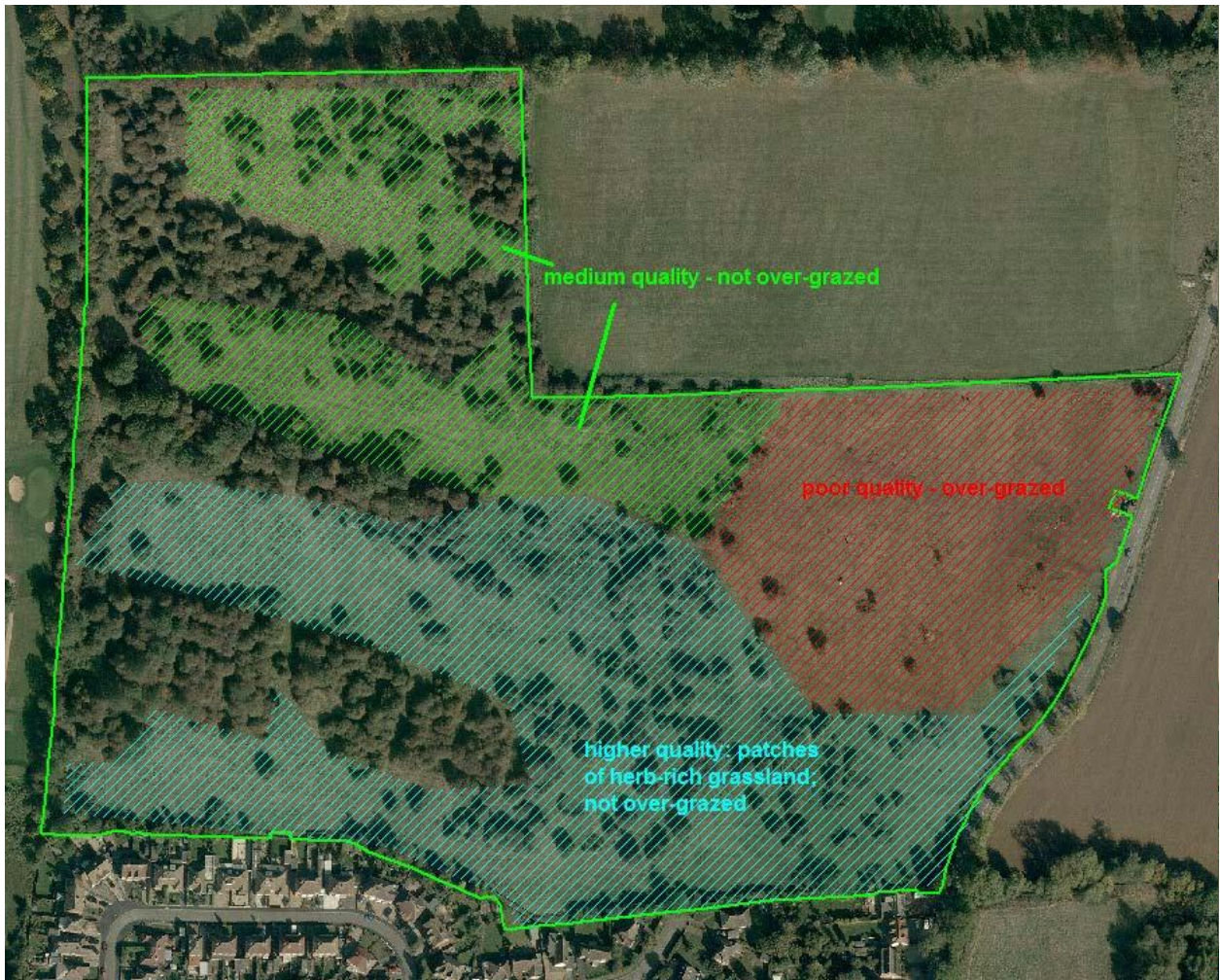
2011



Post 2011 (Google)



Appendix 2: Grassland quality map



Appendix 3: Extracts from 'Fields at Scraftoft' - 1999 survey report (S. Timms, Leicester City Council)

1.1 Management and public use

The large field (1 on attached plan) off Beeby Road may have originally been sub-divided into smaller fields. A substantial area in the north east corner has been lost by development as a sports pitch for De Montford University, creating the present 'L' shape. 'Ridge and furrow' is present in the northern part of the 'L'. The remains of various structures towards Beeby Road and the evidence of ground disturbance in this area are associated with its former use for military purposes. The field was undergrazed in 1999, with a small herd of cattle (about 10 beasts). Whilst this field is not designated as public open space, it is used by local people for a variety of activities, including dog walking, blackberrying and children's play. There is informal access off Beeby road and from some houses off Hall Road/Keays Way, and there may be some encroachment of back gardens.

1.2 Tall herbs

The field has probably been over-grazed and then neglected in the past, because parts of the field, particularly towards Beeby Road, are rapidly becoming invaded by thistles (*Cirsium arvense* and *C. vulgare*), docks (*Rumex obtusifolius* and *R. crispus*) and ragwort (*Senecio jacobaea*). Whilst a certain amount of these tall herbs are beneficial for wildlife, providing a good nectar and pollen source for invertebrates and food for seed-eating birds later on, it is causing the loss of the more valuable unimproved grassland in parts of the site. Growth of these species should be controlled. Ragwort can be controlled by hand-pulling, but because it is poisonous to stock the dead stems must be removed from the field. Perennial weeds such as thistles and docks can be controlled by repeated cutting. In very bad cases the use of a Glyphosate 'weed wipe' can be considered, but very careful application is required to avoid accidental damage to the grassland.

1.3 Scrub

Scattered bramble and hawthorn scrub is also present over the whole field, and is an important habitat as long as it does not colonise any further. Islands of scrub add structural diversity to the grassland by breaking up the field into smaller units or glades, which are grazed at different rates. Structural diversity in the sward is an important factor in increasing invertebrate diversity, and the scrub itself is also a valuable invertebrate habitat, as well as providing nest-sites and feeding areas for birds and small mammals. The blackberries are also very popular with local residents! The scrub should not be allowed to encroach any more than at present. A limited amount of scrub removal would be desirable in places where the islands of scrub are joining up, creating areas which are not grazed at all; this is detrimental in the long term because it will cause the loss of unimproved grassland.

1.4 Pond and ditch

The grassland also has a number of marshy hollows, and drains towards a ditch in the south-west corner. There is a silted up field pond in the extreme south-west corner, colonised by large stands of greater willowherb (*Epilobium hirsutum*). To recreate open water of more value, some dredging of part of the pond is needed.

1.5 Hedges

There are hedges around the field except along the sports pitch boundary, which is separated from the field by a very intrusive chain-link fence. The hedges between the field and the golf-course (along the western boundary and the remaining part of the northern boundary) are very overgrown and have developed into lines of trees and mature scrub of considerable ecological value, and it would not be possible to lay these hedges in the traditional value. However, the other hedges are still in a suitable condition for laying, and new hedges can be planted along the fencing for laying in the future.

1.6 Grassland

The grassland habitat itself is variable in quality due to past grazing regimes. Some areas have been damaged by overgrazing and poaching, and are now dominated by tall herbs. However, there are still areas of herb-rich grassland, although the actual diversity of species is fairly low. Typical grasses are crested dog's-tail (*Cynosurus cristatus*), sweet vernal (*Anthoxanthum odoratum*), meadow barley (*Hordeum secalinum*) and red fescue (*Festuca rubra*), with herbs such as meadow buttercup (*Ranunculus acris*), bird's-foot trefoil (*Lotus corniculatus*), creeping cinquefoil (*Potentilla reptans*), lady's bedstraw (*Galium verum*), red clover (*Trifolium pratensis*), yarrow (*Achillea millefolium*), self-heal (*Prunella vulgaris*), knapweed (*Centaurea nigra*) and agrimony (*Agrimonia eupatoria*). Hay rattle (*Rhinanthus minor* agg.) is rare. In the damper areas, tufted hair-grass (*Deschampsia caespitosa*), hard rush (*Juncus inflexus*) and hairy sedge (*Carex hirta*) are present.

Appendix 4: plant species lists

LWS grassland indicator species found in 2017 by S. Timms and K. Headley of LRERC are highlighted in green. Additional LWS species found by S. Timms in 1999, but not in 2017, are highlighted in blue.

		1999	2017	2017 notes
<i>Achillea millefolium</i>	Yarrow	Y	Y	Grassland occasional
<i>Agrimonia eupatoria</i>	Agrimony	Y	Y	Occasional: grassland adj Beeby Rd
<i>Alopecurus pratensis</i>	Meadow Foxtail		Y	
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Y		
<i>Anthriscus sylvestris</i>	Cow Parsley		Y	Scrub belts
<i>Aphanes arvensis</i>	Parsley Piert		Y	Dry grassland: occasional
<i>Arum maculatum</i>	Cuckoo Pint		Y	Scrub belts
<i>Cardamine pratensis</i>	Lady's Smock		Y	Damper grassland: rare
<i>Carex hirta</i>	Hairy Sedge	Y	Y	Grassland: locally frequent
<i>Centaurea nigra</i>	Knapweed	Y		
<i>Cerastium fontanum</i>	Mouse-ear Chickweed		Y	
<i>Chaerophyllum temulum</i>	Rough Chervil		Y	Scrub belts
<i>Cirsium arvense</i>	Creeping Thistle	Y	Y	Grassland: frequent
<i>Cirsium vulgare</i>	Spear Thistle	Y	Y	
<i>Crataegus monogyna</i>	Hawthorn	Y	Y	Scrub
<i>Cynosurus cristatus</i>	Crested Dog's-tail	Y		
<i>Deschampsia caespitosa</i>	Tufted Hair-grass	Y		
<i>Dipsacus fullonum</i>	Teasel		Y	
<i>Epilobium hirsutum</i>	Great Hairy Willowherb	Y	Y	Pond and scrub
<i>Equisetum arvense</i>	Horsetail		Y	Pond
<i>Festuca rubra</i>	Red Fescue	Y	Y	
<i>Fraxinus excelsior</i>	Ash		Y	Scrub belts
<i>Galium aparine</i>	Cleavers		Y	Scrub belts
<i>Galium verum</i>	Lady's Bedstraw	Y	Y	Grassland : locally frequent
<i>Geranium dissectum</i>	Cut-leaved Cranesbill		Y	
<i>Geranium molle</i>	Dove's-foot Cranesbill		Y	
<i>Geum urbanum</i>	Herb Bennet		Y	Scrub belts
<i>Glechoma hederacea</i>	Ground Ivy		Y	Scrub belts
<i>Hedera helix</i>	Ivy		Y	Scrub belts
<i>Heracleum sphondylium</i>	Hogweed		Y	
<i>Hordeum secalinum</i>	Meadow Barley	Y		
<i>Hypochaeris radicata</i>	Common Cat's-ear		Y	Grassland: occasional
<i>Juncus acutiflorus/articulatus</i>	a Rush		Y	Pond and surrounds; rare
<i>Juncus inflexus</i>	Hard rush	Y		
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	Y	Y	Grassland: occasional
<i>Luzula campestris</i>	Field Wood-rush		Y	Grassland: occasional
<i>Odontites verna</i>	Red Bartsia		Y	Grassland: occasional
<i>Plantago lanceolata</i>	Ribwort Plantain		Y	
<i>Plantago major</i>	Greater Plantain		Y	
<i>Poa annua</i>	Annual Meadow-grass		Y	
<i>Poa trivialis</i>	Rough Meadow-grass		Y	
<i>Potentilla reptans</i>	Creeping Cinquefoil	Y	Y	Grassland: Frequent/abundant
<i>Prunella vulgaris</i>	Self-heal	Y	Y	
<i>Ranunculus acris</i>	Meadow buttercup	Y	Y	Grassland: occasional
<i>Ranunculus bulbosus</i>	Bulbous buttercup		Y	Grassland: frequent
<i>Ranunculus repens</i>	Creeping buttercup		Y	
<i>Rhinanthus minor</i>	Hay Rattle	Y		
<i>Rosa canina</i>	Dog-rose		Y	Scrub

<i>Rubus fruticosus agg.</i>	Bramble	Y	Y	Scrub
<i>Rumex acetosa</i>	Sorrel		Y	Grassland: occasional
<i>Rumex crispus</i>	Curled dock	Y	Y	Grassland: frequent
<i>Rumex obtusifolius</i>	Broad-leaved dock	Y	Y	Grassland: occasional
<i>Rumex sanguineus</i>	Wood dock		Y	Scrub
<i>Salix caprea</i>	Sallow		Y	Scrub
<i>Sambucus nigra</i>	Elder		Y	Scrub
<i>Senecio jacobaea</i>	Ragwort	Y	Y	Grassland: frequent
<i>Silene dioica</i>	Red campion		Y	Scrub belts
<i>Tamus communis</i>	Black Bryony		Y	Scrub belts
<i>Taraxacum</i>	Dandelion		Y	
<i>Trifolium dubium</i>	Lesser Hop-trefoil		Y	
<i>Trifolium pratense</i>	Red Clover	Y	Y	Grassland: occasional
<i>Trifolium repens</i>	White Clover		Y	
<i>Urtica dioica</i>	Nettle		Y	Grassland: locally frequent; scrub
<i>Veronica arvensis</i>	Wall Speedwell		Y	Dry grassland: frequent
<i>Veronica beccabunga</i>	Brooklime		Y	Pond
<i>Veronica chamaedrys</i>	Germander Speedwell		Y	Grassland: occasional
<i>Veronica filiformis</i>	Slender Speedwell		Y	
<i>Veronica hederifolia</i>	Ivy-leaved Speedwell		Y	Scrub belts
<i>Veronica serpyllifolia</i>	Thyme-leaved Speedwell		Y	

Appendix 5: Boundary of candidate Local Wildlife Site

