Meadow Orchard Project

Extended Phase I Habitat Survey Report

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Report written by

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Contents

1 Introduction

1.1 Background

London Wildlife Trust was commissioned by Meadow Orchard Project to undertake an extended phase 1 habitat survey of land known as Meadow Orchard, behind the Hornsey Medical Centre on Park Road, Crouch End, London N8. The site lies within the London Borough of Haringey.

The survey was required to assess the extent of semi-natural habitats present by using the GLA Open Space and Habitat Survey for Greater London Methodology. The GLA Open Space and Habitat Survey for Greater London methodology is recommended in The Mayor's Guide to Preparing Open Space Strategies (A London Plan Best Practice Guide) and is included in The Mayor's Biodiversity Strategy.

This report is in two sections. The first section summarises the habitat types and the significant vascular plant species found at the site. The appendices comprise all the species, photographic and map data.

1.2 Site details

1.2.1 Location

The site is located in the London Borough of Haringey at TQ 29488883. The site is approximately 0.6 hectares acres in area.

1.2.2 Topography

The site has a slight north facing slope towards the eastern end but is otherwise generally flat.

1.2.3 Hydrology

No hydrology survey has been undertaken on site. The eastern and western ends of the site are generally dry. The centre of the site at the time of the visit was damp with some pooling of surface water. It is believed but not confirmed that a small stream or historical (now broken) drain line runs underneath the site that may be the origin of this surface water.

1.2.4 Access and usage

Access to the site is by a pedestrian wooden gate in the east of the site from the car park of the Hornsey medical centre. The gate is locked with a combination padlock and access is for Meadow Orchard Project members only. There is no vehicular access. There are as series of trampled trackways around the site, which are probably formed and used by foxes as well as people.

1.2.5 Boundaries

The site is entirely surrounded by fences. All are of chain link of differing types except that along the eastern boundary, which is a wooden fence with wooden posts like that of a garden fence.

2 Habitat Survey (Extended Phase I)

2.1 Aims of the survey

The aims are to: -

- Identify dominant, characteristic and otherwise unusual vascular plant species and the chief habitats present using the DAFOR scale[1] for each community;
- Identifying and mapping habitat communities;
- Determine the importance of these features in a regional (London) and national context as noted in Biodiversity Action Plans;
- Determine whether or not the site supports notable, rare or protected species;
- Make incidental recording of other fauna sightings;

Survey objectives did not include non-vascular plant species (e.g. mosses, algae) surveys.

2.2 Habitat survey methodology

A Habitat Survey (phase I extended) was carried out on 6th May 2010 by Anthony Wileman. The survey followed standard Phase I habitat survey methodology (JNCC 1993), as modified for Greater London by the former London Ecology Unit and adopted by the Greater London Authority (LEU 1994). The site was divided into 5 habitat compartments. Photographs of the site found in Appendix 3 were taken on 29th May 2010.

Characteristic, rare and interesting species and plant assemblages were evaluated for conservation designations and assessed as to whether they were notable for the Greater London area. Notable is defined as species which were recorded from 15% or fewer of the 400 two-kilometre recording squares (tetrads) in Greater London in the *Flora of the London Area* (Burton 1983). Casual recording of fauna was attempted throughout the duration of the Habitat Survey (Appendix 3)

Complex taxa such as *Taraxacum (*dandelions*)* and *Rubus (*brambles*)*, are treated as aggregates as there is little value in distinguishing these for determining habitat types, especially in London.

2.3 Limitations of the survey

2.3.1 Seasonal Plants

The timing of the survey was considered highly appropriate to characterise the habitats present on site. However, because the survey was undertaken only on one day, it was not possible to note all species on site (particularly autumn and late summer flowering species).

[1] A standard format for recording relative abundance

2.3.2 Access

The entire site was accessed and surveyed. All species were identifiable o site so no off site identification of species was required.

2.4 Plant nomenclature and rarity

The *New Flora of the British Isles* [Stace, 1997] was consulted for plant nomenclature, the standard text. English names have been used in preference to Latin (only quoted in the first instance) in order to facilitate readability of the report.

Any uncommon vascular plant species were identified in the London context using the *Flora of the London Area* (Burton 1983). For national rarity The Atlas of British Flora (Preston, Pearman & Dines, 2002) was referred to (where a taxon appearing in 150 or less 10 x 10km squares was considered rare).

2.5 Habitat rarity

The London and Haringey Biodiversity Action Plans were consulted on regional habitat rarity while the UK Biodiversity Action Plan was consulted on national habitat rarity.

2.6 Habitat descriptions

A map showing the location of the habitats appears in Appendix 1. A full list of plant species recorded at the site during the Phase I survey; along with an assessment of their abundance using the DAFOR scale in each habitat compartment appears in Appendix 2.

2.6.1 Dry grassland (48%)

This habitat was found to be in two patches divided by the damp grassland described below; one at the eastern end and one at the western end. It is unknown when the grassland was last mown and it appears to have had little or no management in the last five years.

No grass species is dominant although false oat-grass (*Arrhenatherum elatius*) is the most abundant. Other frequent grasses are common bent, (*Agrostis capillaris*), cock's-foot (*Dactylis glomerata*), common couch *Elytrigia repens*) and Yorkshire-fog (*Holcus lanatus*) while meadow foxtail (*Alopecurus pratensis*), barren brome (*Anisantha sterilis*) red and giant fescues (*Festuca rubra* and *F. gigantea*), perennial rye-grass (*Lolium perenne*) and narrow-leaved, smooth and rough meadow-grasses (*Poa angustifolia, P. pratensis* and *P. trivialis*) are present to a lesser degree.

Forbs[2] present include yarrow (*Achillea millefolium*), common mouse-ear (*Cerastium glomeratum*), meadow vetchling (*Lathyrus pratensis*), ribwort plantain (*Plantago lanceolata*), silverweed (*Potentilla anserina*), creeping buttercup (*Ranunculus repens*),

[2] Herbaceous species that are not grasses, rushes or sedges.

curled dock (*Rumex crispus*), common ragwort (*Senecio jacobaea*), dandelion group (*Taraxacum* species), red clover (*Trifolium pratense*) and common vetch (*Vicia sativa*).

There are a scattering of young trees and shrubs of pedunculate oak (*Quercus robur*), cherry species (*Prunus* species), white poplar (*Populus alba*), bramble species (*Rubus fruticosus* agg) and buckthorn (*Rhamnus cathartica*) present within the dry grassland area.

2.6.2 Damp grassland (30%)

The wet grassland divides the two areas of dry grassland and like the dry grassland appears to have had little or no management in the last five years.

The grass composition is similar to that of the dry grassland although common bent is the most frequent species while narrow-leaved meadow-grass, barren brome and giant fescue are absent while a small patch of tufted hair-grass (*Deschampsia cespitosa*); a species commonly found in wet grasslands and fens can be found towards the site boundary to the north.
Forbs composition is frequented by silverweed with the occasional yarrow, meadow vetchling, ribwort plantain, creeping buttercup, dandelion and common vetch. Wetland plant species not found in the dry grassland are jointed rush (*Juncus conglomeratus*) and great willowherb (*Epilobium hirsutum*).

There are a scattering of young trees and shrubs of pedunculate oak (*Quercus robur*), cherry species (*Prunus* species) and bramble species (*Rubus fruticosus* agg) present within the wet grassland area.

Collectively the grasslands can be classified as typical semi-improved neutral grassland.

2.6.3 Woodland edge type habitat (17%)

Woodland edge type habitat was characteristic of areas where it was generally very shady due to the presence of a somewhat closed canopy of large trees. This habitat borders the entire length of the southern site boundary and is generally narrow and defined by the width of one large tree. Some cutting of shrubs has been undertaken in recent years.

Trees and shrubs creating the shade of these areas are composed of predominantly pedunculate oak and cherry species with laburnum (*Laburnum anagyroides*) and sycamore (*Acer pseudoplatanus*). Several lilac shrubs along the fenceline have been heavily cut back in recent years and are now rather stunted in growth as a result. Tree saplings are predominantly of sycamore, horse-chestnut (*Aesculus hippocastanum*), ash (*Fraxinus excelsior*) and cherry with lesser amounts of Norway maple (*Acer platanoides*), hornbeam (*Carpinus betulus*), laburnum, white poplar, Oregon-grape (*Mahonia aquifolium*), buckthorn, elder and yew and pedunculate oak.

Ground flora composition is mostly that of wood avens (*Geum urbanum*) with garlic mustard (*Alliaria petiolata*), cleavers (*Galium aparine*), ivy (*Hedera helix*), Spanish bluebell (*Hyacinthoides hispanica*), honeysuckle (*Lonicera peryclymenum*), ribwort

plantain, creeping buttercup, bramble species, common nettle (*Urtica dioica*) and ivy-leaved speedwell (*Veronica hederifolia*).

Bramble scrub (3%)

This habitat is located in patches along the northern and western boundaries of the site and as two patches, one large and one small, within the confines of the site. There is some very limited evidence of cutting of the scrub but its effect on controlling the spread of the bramble has been limited.

The bramble scrub habitat is clearly dominated by bramble species with lesser amounts of grass and forb species present that are found within the adjacent habitats. A few young and sapling pedunculate oak and cherry trees can be found within this habitat.

2.6.4 *Seasonal wet depressions (2%)*

There are two seasonal wet depressions and both are found within the wet grassland area. The plant species composition similar to that found in the wet grassland habitat with less species but has more bare soil. No true wetland habitat around or within these depressions has developed suggesting that they have only recently formed.

2.7 Incidental fauna

As part of the survey incidental vertebrate and invertebrates were recorded and are listed in Appendix 3. No assessment was made as to whether these were breeding on site.

2.8 Habitat evaluation

The whole site is can be considered to fit into the designation 'Parks and Green spaces' local habitat for the London (regional) Biodiversity Action Plan and 'Parks and Open spaces' for the Haringey (local) Biodiversity Action Plan local habitat. There are no UK Biodiversity Action Plan habitats present. Whilst no important habitats are present, the site is still locally valuable, and through appropriate management can continue to be locally important for wildlife.

The site comprises part of the Crouch End Playing Fields Complex Site of Borough Grade I importance for Nature Conservation (SINC).

The current habitats have developed due in part to the lack of management. Although this has benefitted the wildlife of the site through the development of a mosaic of semi-improved grassland, scrub and woodland edge habitats, if the lack of management continues woodland and scrub succession will invariably reduce the wildlife value. It is suggested that the habitats present should be maintained through appropriate management that will encourage natural colonisation of appropriate species instead of planting/seeding with wildflower mixes and/or planting of trees/shrubs. Some local translocation of saplings oak trees from the grassland area

to the woodland edge could be considered as could some planting of a hedgerow feature along the northern boundary.

It is considered good practice that any development having an impact on these habitats is adequately mitigated for.

It should be emphasised that although habitats have some and occasionally great value as stand alone 'parcels' within the landscape, a mosaic of differing habitats within that landscape have significantly more value for biodiversity than any single habitat type.

2.9 Plant species evaluation

The plant species found are typical of an urban grassland with trees that has been left to develop 'naturally' (not intensively mown). Collectively the species present contribute to a locally important habitat for invertebrates, birds and mammals that is surrounded by habitats that typically have poorer value for wildlife.

No plant species fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 were identified during this survey. It is a criminal offence to pick, uproot or otherwise damage any of these species. It is considered unlikely that any schedule 8 protected plant species were present at the site.

No UK or London (regional) Biodiversity Action Plan vascular plant species were recorded during the survey.

No species found on site are considered to be London notable species. These are those species that occur in less than 15% of the 400 tetrads as indicated in the *Flora of the London Area* (Burton 1983).

2.10 Animal species evaluation

The site holds a locally important population of yellow meadow ant (*Lasius flavus*). The ant hills present within the grassland are possibly the only ones present within a several mile radius of the site and provide a valuable food source for green woodpecker (*Picus viridis*).

The other animal species found suggest that the site offers good food plants for feeding invertebrates such as bees and butterflies and other nectar feeding species. These invertebrates in turn attract a variety of birds, which also find cover in the trees, shrubs and scrub to breed and/or roost and hide from predators.

No animal species fully protected under the Schedule 5 of the Wildlife and Countryside Act was identified during the survey. It is possible that bats are present on site due to the presence of mature trees. All bat species are protected by law and a bat survey should be undertaken if any works on the mature trees is undertaken on site.

It is possible that reptiles such as slow worm (*Anguis fragilis*) may be present on site as the habitat would be ideal to support them. However, it is considered unlikely that a population is present due to the isolation of the site from other suitable habitat. Despite this a reptile survey should ideally be taken out before the areas of grassland are significantly changed.

No UK or London (regional) Biodiversity Action plan animal species were recorded during the survey.

3 Conclusion

The habitats at the site combine to provide a mixed biodiversity of terrestrial habitats and associated species. Of these habitats, the grasslands, woodland edge type habitat and bramble scrub provide the most important animal and plant communities and the yellow meadow ant populations are of particular value locally.

Without appropriate management the grasslands and the yellow meadow ant populations are perceived to be under threat on site from successional tree and scrub encroachment. Future management should aim to retain the mosaic of habitats on site.

4 References

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JNCC. 2003. *Handbook for Phase 1 Habitat Survey – A technique for Environmental Audit*. Joint Nature Conservation Committee, Peterborough.

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London Borough of Haringey, 2009. *Biodiversity Action Plan*. http://www.haringey.gov.uk/biodiversity_action_plan_2009-2.pdf

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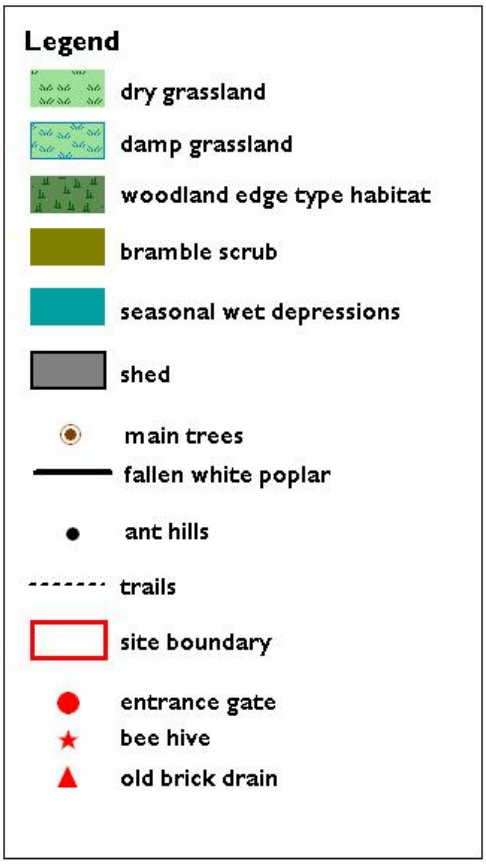
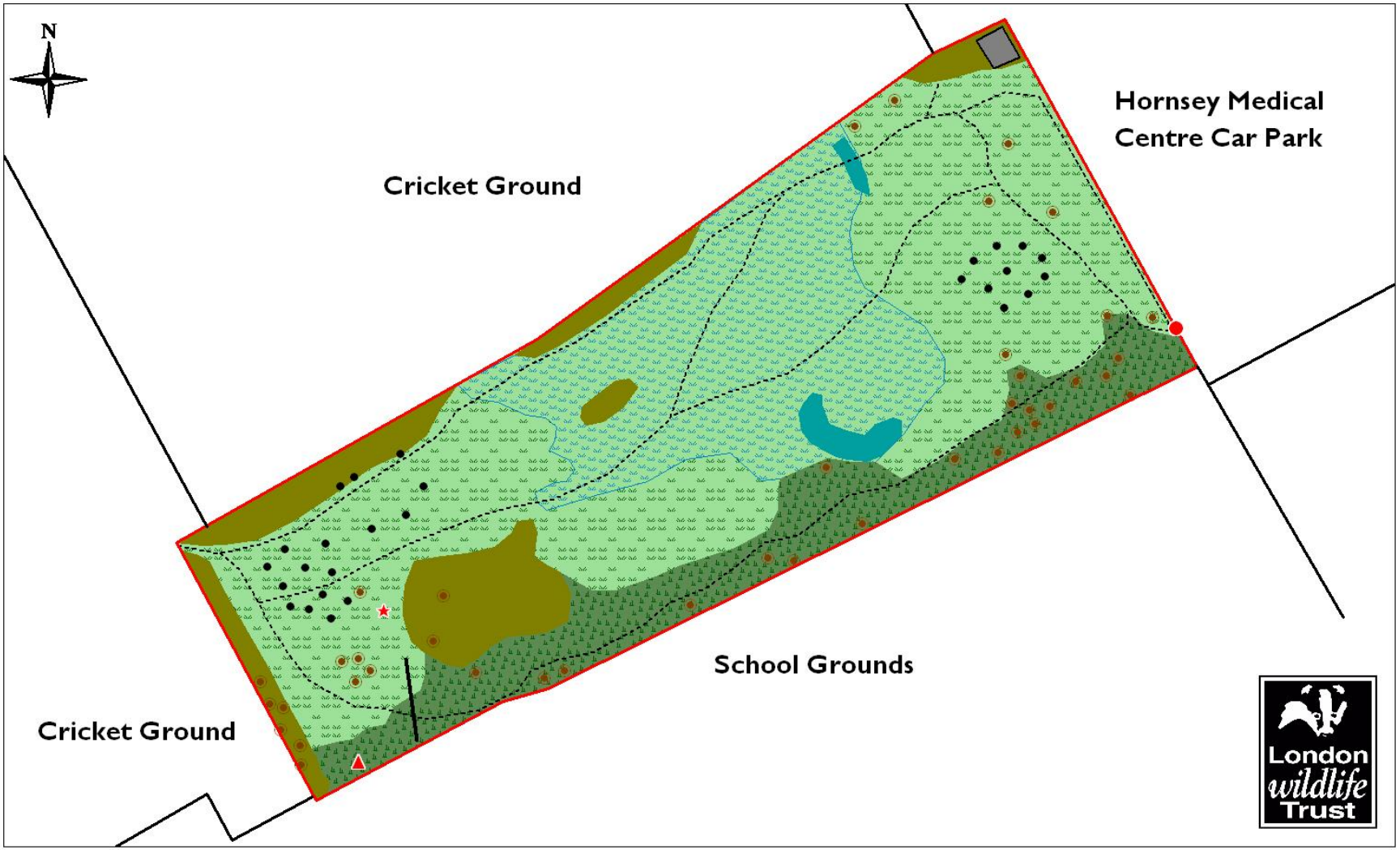
Appendix 1

Site Map


Legend
dry grassland
damp grassland
woodland edge type habitat
bramble scrub
seasonal wet depressions
shed
main trees
fallen white poplar
ant hills
trails
site boundary
entrance gate
bee hive
old brick drain

Meadow Orchard Project



Produced by the London Wildlife Trust

Scale 1: 730

Appendix 2

Phase 1 Habitat Survey Plant Species List

Plant Species List (DAFOR scale: D = Dominant; A = Abundant; F = Frequent; O = Occasional; R = Rare)

Species		Habitats				
Scientific Name	**Common Name**	**Dry Grassland**	**Wet Grassland**	**Woodland edge type**	**Bramble scrub**	**Seasonal wet depressions**
Acer platanoides	Norway maple			R		
Acer pseudoplatanus	sycamore			R		
Achillea millefolium	yarrow	O	O			
Aesculus hippocastanum	horse-chestnut			O		
Agrostis capillaris	common bent	F	O		O	
Agrostis stolonifera	creeping bent	O	F			F
Allilaria petiolata	garlic mustard			O		
Alopecurus pratensis	meadow foxtail	O	O			
Anisantha sterilis	barren brome	R			R	
Arctium minus	lesser burdock			R		
Arrhenatherum elatius	false oat-grass	A	O	R	F	O
Bellis perennis	daisy	R				
Carpinus betulus	hornbeam			R		
Cerastium fontanum	common mouse-ear	O				
Dactylis glomerata	cock's-foot	F	O		O	R
Deschampsia cespitosa	tufted hair-grass		R			
Elytrigia repens	common couch	F	O	R	O	R
Epilobium hirsutum	great willowherb		R			
Festuca gigantea	giant fescue	R				
Festuca rubra	red fescue	O	R	R	O	
Fraxinus excelsior	ash			O		
Galium aparine	cleavers	R		O	F	
Geranium dissectum	cut-leaved crane's-bill	R				

Plant Species List (DAFOR scale: D = Dominant; A = Abundant; F = Frequent; O = Occasional; R = Rare)						
Species		**Habitats**				
Scientific Name	**Common Name**	**Dry Grassland**	**Wet Grassland**	**Woodland edge type**	**Bramble scrub**	**Seasonal wet depressions**
Geranium molle	dove's-foot crane's-bill	R				
Geranium robertianum	herb-robert			R	R	
Geum urbanum	wood avens	R		A	O	
Hedera helix	ivy			O		
Holcus lanatus	Yorkshire-fog	F	O		O	O
Hyacinthoides hispanica	Spanish bluebell			O		
Juncus conglomeratus	Jointed rush		R			R
Laburnum anagyroides	laburnum			O		
Lathyrus pratensis	meadow vetchling	O	O			R
Lolium perenne	perennial rye-grass	O	R	R	R	R
Lonicera peryclymenum	honeysuckle			O	R	
Mahonia aquifolium	Oregon-grape			R	R	
Plantago lanceolata	ribwort plantain	O	O	O	R	
Poa angustifolia	narrow-leaved meadow-grass	O				
Poa pratensis	smooth meadow-grass	R	R			
Poa trivialis	rough meadow-grass	R	R	R	R	
Populus alba	white poplar			R		
Potentilla anserina	silverweed	O	F			O
Prunella vulgaris	selfheal	R				
Prunus sp.	cherry species	O	R	F	R	
Quercus robur	pedunculate oak	O	O	F	R	
Ranunculus repens	creeping buttercup	O	O	O	R	
Rhamnus cathartica	buckthorn	R		R		
Rubus fruticosus agg	bramble species group	R	R	O	D	

Plant Species List (DAFOR scale: D = Dominant; A = Abundant; F = Frequent; O = Occasional; R = Rare)						
Species		**Habitats**				
Scientific Name	**Common Name**	**Dry Grassland**	**Wet Grassland**	**Woodland edge type**	**Bramble scrub**	**Seasonal wet depressions**
Rumex crispus	curled dock	O	R		R	
Sambucus nigra	elder			R	R	
Senecio jacobaea	common ragwort	O				
Stachys sylvatica	hedge woundwort			R		
Syringa vulgaris	lilac			O		
Taraxacum sp.	dandelion species group	O	O		R	
Taxus baccata	yew			R		
Trifolium pratense	red clover	O				
Trifolium repens	white clover	R	R			
Urtica dioica	common nettle			O	O	
Veronica hederifoila	ivy-leaved speedwell			O		
Vicia sativa	common vetch	O	O			
Vicia sepium	bush vetch	R	R			

Appendix 3

Incidental Fauna list

Species	
Common Name	**Scientific Name**
Invertebrates	
great black slug	*Arion ater*
common froghopper	*Philaenus spumarius*
small white butterfly	*Pieris rapae*
large white butterfly	*Pieris brassicae*
speckled wood butterfly	*Pararge aegeria*
marmalade fly	*Episyrphus balteatus*
yellow meadow ant	*Lasius flavus*
black garden ant	*Lasius niger*
honey-bee	*Apis mellifera*
early bumblebee	*Bombus pratorum*
buff-tailed bumblebee	*Bombus terrestris*
white-tailed bumblebee	*Bombus lucorum*
oak marble gall wasp	*Andricus kollari*
knopper gall wasp	*Andricus quercuscalicis*
cherry gall wasp	*Cynips quercusfolii*
Vertebrates	
Mammals	
grey squirrel	*Sciurus carolinensis*
Birds	
sparrowhawk	*Accipiter nisus*
woodpigeon	*Columba palumbus*
green woodpecker	*Picus viridis*
wren	*Troglodytes troglodytes*
robin	*Erithacus rubecula*
blackbird	*Turdus merula*
song thrush	*Turdus philomelos*
blackcap	*Sylvia atricapilla*
blue tit	*Cyanistes caeruleus*
great tit	*Parus major*
long-tailed tit	*Aegithalos caudatus*
magpie	*Pica pica*
greenfinch	*Carduelis chloris*
goldfinch	*Carduelis carduelis*

Appendix 4

Site Photographs

Meadow Orchard Site entrance (from Hornsey Medical Centre car park)

Eastern area dry grassland

Small wet area depression (no water present at time of photograph)

Damp grassland with high population of silverweed looking west

Developing woodland edge habitat and trail

Scrub along northern boundary encroaching into grassland

Western boundary

Western grassland with red clover

Silverweed in damp grassland

Red clover in western dry grassland

Meadow vetchling in damp grassland

Young pedunculate oak in dry grassland