

LAND OFF BLYTHE STREET, WOMBWELL

Extended Phase 1 Habitat Survey

Gleeson Developments Limited

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1.0 INTRODUCTION

SLR Consulting Limited was commissioned by Gleeson Developments Ltd to undertake an Extended Phase 1 Habitat Survey and desk study of land located off Blythe Street and Colewell Close, Wombwell, Barnsley in South Yorkshire (approximate central OS grid reference SE 391 035). The land contained the former Highfield Grange Resource Centre, a day care centre for older people, which has now been demolished and the ground levelled. Planning permission is being sought to construct houses.

1.1 The Site

The site (herein referred to as the 'Site') is located off Blythe Street and Colewell Close within the town of Wombwell. Existing residential development lies immediately to the north and west. To the east, on the opposite side of Colewell Close, there is a garden allotment and other residential areas. To the southeast there is a small area of formal open space and to the south an area of land currently being developed by a housing association.

The Site contains a mixture of open habitats including improved and poor semi-improved grassland, as well as areas supporting ruderal and flower-rich early successional vegetation within the footprint of former Highfield Grange Resource Centre, which has been demolished and levelled. A large area of hard standing, formerly an access drive and parking facility, extends into the Site from the northern boundary. A small number of trees remain from earlier landscape planting associated with the former development. The margins of the Site to the west and south support scrub, and tall herb as well as overhanging branches of trees and scrub from adjoining land. There are no water bodies or watercourses within the Site, and no water bodies were evident within a 500m radius of the Site boundary.

2.0 METHODOLOGY

2.1 Desk study

The Barnsley Biological Records Centre was commissioned to undertake a search of non-statutory designated sites for nature conservation and protected/ notable species for the Site, and land within a 1.5km radius.

Information on statutory designated sites for nature conservation and geological interest was also obtained from the MAGIC website managed by Natural England www.magic.gov.uk.

2.2 Field Survey

2.2.1 Extended Phase I Habitat Survey

The Extended Phase I habitat survey and mapping exercise was carried out by an experienced ecologist with SLR Consulting on 15th June 2015 using standard Phase 1 Habitat survey methodology (JNCC, 2010).

Habitats and features with potential to support protected and/ or conservation priority fauna, together with any field signs of such species were searched for. The Site and a surrounding 30m radius were searched for badger *Meles meles* setts and field signs. Trees were

assessed for their potential to support roosting bats, based on criteria within the second edition of the Bat Conservation Trust's Good Practice Guidelines (Hundt, 2012), refer to Appendix C.

Searches were also made for invasive species, including those listed on Schedule 9 of the Wildlife and Countryside Act 1981.

In addition to general habitat classification and mapping, botanical species within the Site, and their abundance (**Dominant**, **Abundant**, **Frequent**, **Occasional** or **Rare**) was recorded; the results are presented in Appendix B.

Habitats or features of interest were recorded on the field map using target notes (see Drawing 1 and Appendix A).

2.3 Limitations

2.3.1 Desk Study

Desk study data is unlikely to be exhaustive, especially in respect of species, and is intended mainly to set a context for the study. It is therefore possible that protected species not identified during the data search do in fact occur within the vicinity of the Site.

2.3.2 Field Survey

There were no constraints in the undertaking of the field survey.

2.4 Quality Assurance and Environmental Management

The surveyor follows the code of professional conduct set out by the Chartered Institute of Ecology and Environmental Management (CIEEM) when undertaking ecological work.

3.0 RESULTS

3.1 Desk study

3.1.1 Statutory designated sites

There were no statutory designated sites for nature conservation on Site, or within 1.5km of the Site boundary.

3.1.2 Non-statutory designated sites

Three Barnsley Council Local Wildlife Sites (LWSs), two of which are candidate LWSs, lie within a 1.5 km radius of the Site; in order of closest proximity, details of these are shown in Table 3.1 below.

Table 3.1: Non-Statutory Local Wildlife Sites within 1.5km of the Site

Name of site	OS Grid reference	Distance from the site (m)	Reason for designation/ proposed designation
Swaithe Flood Meadows Candidate LWS	SE381042	1 km to NW	Arable field subject to periodic flooding containing some marshy grassland & ruderal vegetation
Wombwell Wood LWS	SE381026	1.1km to SW	Large extent of broad-leaved plantation woodland with ancient woodland indicator plants
Parkhill Nature Reserve Candidate LWS	SE406031	1.4km to SE	Diverse range of habitats from broad-leaved woodland, scrub, swamp, ponds and modified neutral grasslands

3.1.3 Species

A total of 444 protected and notable species records were produced for the search area, although none of this data appears to relate to the Site itself. The majority of the records were for bird species (395 records). These comprised a range of Birds of Conservation Concern (BoCC) records dating from the early 1990s to 2013. Most were for well-watched locations such as Parkhill Nature Reserve to the east of the Site and locations along the Dove Valley to the north of the Site such as Netherwood Marsh. A few were for locations within Wombwell itself (including from Wombwell Cemetery to the south-east).

Of the remaining 49 species records, 42 of these were for mammals. This included four for badger, 10 for water vole *Arvicola amphibius* (from Parkhill Nature Reserve and the River Dove) and 26 for bats comprising at least four species including noctule *Nyctalus noctula* and *Daubenton's bat* *Myotis daubentonii*, with most of the records of these two species coming from Parkhill Nature Reserve. Bat records included a small number of roost sites including

and other types of observation. The two amphibian records were for great crested newt *Triturus cristatus* these relating to a pond on Wombwell Golf Course about 1km to the south of the Site dating from 1991. Four reptile records were provided for grass snake *Natrix natrix*, with three of these relating to sightings at Parkhill Nature Reserve and occurring during 2005. A more recent grass snake record (dating from 2012) was provided for Smithy Lane Marsh, over a kilometre west of the Site.

Appendix D contains the full data set, provided by the Barnsley Biological Records Centre.

3.2 Field Survey

3.2.1 Overview

The results of the Phase 1 Habitat Survey are illustrated in map form (Drawing 1), with the accompanying target notes in Appendix A.

Improved and poor semi-Improved grassland

Improved and poor semi-improved grassland occupies a sloping bank that runs along the southern Site boundary and a part of the western boundary (Plate 1). It also occupies an area close to the eastern boundary with Colewell Close. The latter comprises a largely rank sward of grass species including Yorkshire fog *Holcus lanatus*, false oat-grass *Arrhenatherum elatius* cock's-foot *Dactylis glomerata*, smooth-stalked meadow-grass *Poa pratensis*, and locally abundant red fescue *Festuca rubra*. These swards contain a variable herbaceous component that includes dandelion *Taraxacum officinale* agg., ribwort plantain *Plantago lanceolata*, creeping buttercup *Ranunculus repens*, daisy *Bellis perennis*, common field speedwell *Veronica persica* and common ragwort *Senecio jacobaea*.



Plate 1: View (looking west) of the southern part of the Site with the southern boundary marked by a well-vegetated margin of scrub and overhanging vegetation from adjacent land seen on the left. The sloping bank that can be seen here extends around to a part of the western side of the Site. Rank improved, poor semi-improved grassland comprised most of the habitat in this part of the Site.

Early successional and bare ground

Early successional habitat occurs within the footprint of the former buildings forming the Highfield Grange Resource Centre, now demolished and levelled (Plates 2 and 3). This comprises low ephemeral and perennial pioneer vegetation, often with clovers and trefoils predominating (especially black medick *Medicago lupulina*, lesser trefoil *Trifolium dubium* and white clover *Trifolium repens*), along with locally frequent shepherd's purse *Capsella bursa-pastoris*, scentless mayweed *Tripleurospermum inodorum*, common cat's-ear *Hypochaeris radicata*, greater plantain *Plantago major*, wall speedwell *Veronica arvensis*, procumbent pearlwort *Sagina procumbens*, feverfew *Tanacetum parthenium* and locally frequent creeping bent *Agrostis stolonifera* in a mosaic with bare ground and tall ruderal species such as weld *Reseda luteola* and Melilot *Melilotus* sp.



Plate 2: View (to west) of the former area of building, now demolished, supporting plant communities that are characteristic of early successional habitats.



Plate 3: View (to the north-east) of the main area of the Site that supports flower-rich early successional habitat.

Tall Ruderal

Tall ruderal habitat occurs mainly within and on the margins of the former buildings now demolished and along some of the margins of the Site to the west. In and around the area of former demolition it occurs as a mosaic with other vegetation and bare ground (Plate 4) and the species present are diverse in range. These include melilot, teasel *Dipsacus fullonum*, weld, creeping thistle *Cirsium arvense*, spear thistle *Cirsium vulgare*, scented mayweed *Matricaria recutita* and prickly lettuce *Lactuca serriola*. The western margins of the Site supported stands of common nettle *Urtica dioica* and thistles *Cirsium* sp.



Plate 4: View of taller ruderal vegetation in a mosaic with flower-rich perennial vegetation located on the margins of the former area of demolition near to the southern end of the Site.

Trees and shrubs

The Site contains four semi-mature/ young trees, appearing to be landscape plantings that survived the demolition process, although most appear to have experienced some damage as a result of this. The largest of the trees is a semi-mature beech *Fagus sylvatica* (Tree T1 in Drawing 1). The other trees comprise two rowan *Sorbus aucuparia* and a single Swedish whitebeam *Sorbus intermedia*. Some scrub lies along the western margin, mainly comprising elder *Sambucus nigra*. Remnants of former landscape planting lie along the northern boundary and close to the southern boundary, and include species such as Leyland cypress x *Cupressocyparis leylandii*, Himalayan cotoneaster *Cotoneaster simonsii* and Japanese variegated spindle *Euonymus japonica*. The southern and western boundaries give the

impression that there is a lot of scrub growing on the margins of the Site (see Plate 1) but this is due to overhanging vegetation from trees and shrubs outside the Site boundary. Some of this actually also grows through the fence line. Along the southern boundary wild plum *Prunus avium* has suckered into the Site and is invading areas of open rank grassland (target note 3).

3.2.2 Protected Species

Birds

Only wood pigeon *Columbus palumba* and goldfinch *Carduelis carduelis* were noted on the Site during survey. Dunnock *Prunella modularis* and blackbird *Turdus merula* were heard on land adjacent to the Site.

Reptiles

No reptiles were recorded during the survey, and although some of the habitats present appear, superficially at least, suitable for reptiles, their isolation within the landscape and relatively recent origin, suggests that the Site will not support reptiles.

Bats

The four on-Site trees (T1–T4) were assessed as having negligible (i.e. Category 3) potential for roosting bats. The well vegetated western and southern margins of the Site appear to provide some potentially productive foraging habitat for bats, and are likely to form functional bat commuting routes.

Badger

There was no evidence of badger found within or around the Site.

Invertebrates

No protected or notable invertebrate species were recorded. The early successional vegetation within the footprint of the former buildings (now demolished) comprises some very flower-rich areas, mainly dominated by Leguminosae (clovers and trefoils) and these were observed to be utilised by several bee species including tree bumblebee *Bombus hypnorum*. A range of other insects were recorded including Adonis ladybird *Hippodamia variegata*, the day-flying moth known as Mother Shipton *Euclidia mi* and the plantbug *Conostethus venustus*, the latter a recent colonist to Britain occurring on mayweed species. All these and other species recorded on the Site are familiar components of faunas on brownfield habitat in the wider region. Common bird's-foot trefoil *Lotus corniculatus*, the main foodplant of dingy skipper *Erynnis tages*, was only very rarely encountered and due to the scarcity of this plant it is considered unlikely that the Site supports this species of butterfly.

3.2.3 Invasive Species

One Schedule 9 species was found to be present within the Site boundary. This was for Himalayan cotoneaster *Cotoneaster simonsii*. An expanding clump of this growing around

other introduced non-native shrubs was located at the southern end of the Site close to the Site boundary (target note 1). Another smaller area of growth was located at the northern boundary near to the main access entrance (target note 2). This species appears to have been established on the Site as part of the landscape planting of the former development.

4.0 RELEVANT LEGISLATION & POLICY¹

4.1 Legislation

4.1.1 *Habitat Regulations*

The Conservation of Habitats and Species Regulations 2010 transpose Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (Habitats Directive) into English law, making it an offence to deliberately capture, kill or disturb² wild animals listed under Schedule 2 of the Regulations. It is also an offence to damage or destroy a breeding site or resting place of such an animal (even if the animal is not present at the time).

4.1.2 *Wildlife & Countryside Act*

The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act (CROW) 2000 and the Natural Environment and Rural Communities Act (NERC) 2006, consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive), making it an offence to:

- Intentionally kill, injure or take any wild bird or their eggs or nests (with certain exceptions) and disturb any bird species listed under Schedule 1 to the Act, or its dependent young while it is nesting;
- Intentionally kill, injure or take any wild animal listed under Schedule 5 to the Act; intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any wild animal listed under Schedule 5 to the Act; intentionally or recklessly disturb certain Schedule 5 animal species while they occupy a place used for shelter or protection;
- Pick or uproot any wild plant listed under Schedule 8 of the Act.

4.1.3 *National Parks & Access to the Countryside Act*

National Nature Reserves (NNR's) and Local Nature Reserves (LNR's) are designated under the National Parks and Access to the Countryside Act 1949.

4.1.4 *Natural Environment & Rural Communities Act*

The NERC 2006 places a duty on authorities to have due regard for biodiversity and nature conservation during the course of their operations.

¹ Please note that this legal information is a summary and intended for general guidance only. The original legal documents should be consulted for definitive information. Web addresses providing access to the full text of these documents are given in the References & Bibliography section.

² Disturbance, as defined by the Conservation of Habitats and Species Regulations 2010, includes in particular any action which impairs the ability of animals to survive, breed, rear their young, hibernate or migrate (where relevant); or which affects significantly the local distribution or abundance of the species.

4.2 Policy

4.2.1 National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) states that the planning system should contribute to and enhance the natural and local environment by:

- Recognising the wider benefits of ecosystem services; and
- Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

Other key principles of the NPPF relating to biodiversity are:

- The conservation of International and National statutorily designated sites;
- Protection of ancient woodland and veteran trees;
- The creation, protection, enhancement and management of networks of biodiversity and green infrastructure;
- The preservation, restoration and recreation of priority habitats and ecological networks; and
- The recovery of priority species populations.

4.2.2 Biodiversity Action Plans

The UK Biodiversity Action Plan (UKBAP) (Anon, 1995) was organised to fulfil the Rio Convention on Biological Diversity in 1992, to which the UK is a signatory. A list of national priority species and habitats has been produced with all listed species/ habitats having specific action plans defining the measures required to ensure their conservation. Regional and local BAPs have also been organised to develop plans for species/habitats of nature conservation importance at regional and local levels.

4.2.3 Local Plans

County, District and Local Councils have Plans and other policy documents that include targets and policies which aim to maintain and enhance biodiversity. These are used by Planning Authorities to inform planning decisions.

5.0 DISCUSSION & RECOMMENDATIONS

5.1.1 *Breeding Birds*

The majority of the Site does not appear to have significant potential to support nesting birds. However, some parts along the western Site boundary, where scrub and tall ruderal vegetation combine to form dense vegetation, do have some scope to support breeding birds, and as such, Site clearance works should ideally begin outside of the main bird breeding season (which for most species extends between March and August inclusive).

If this is not feasible a check for nesting birds should be undertaken immediately prior to any habitat destruction. Should nesting birds be encountered, an exclusion zone around any active nests would be required to prevent damage of the nests and injury to the young birds until they had fledged.

5.1.2 *Bats*

The Site has no potential for roosting bats. The Site, and its perimeter in particular, does however, offer limited potential for foraging and/ or commuting bats, most notably along the southern and western margins where edge habitat, formed by scrub and trees immediately beyond the Site boundary, but over-hanging into the Site, exists.

5.1.3 *Reptiles*

Although some of the Site appears, superficially, to have potential to support reptiles, the surrounding area is substantially built up and therefore those habitats present on Site are somewhat isolated within the landscape. The on-Site habitats are also of relatively recent origin, developing from more formal landscaped areas when the (now demolished) Highfield Grange Resource Centre was still in use, making it unlikely that reptiles will have colonised. As such, no further surveys or particular recommendations are suggested for this group.

5.1.4 *Invasive Species*

The one Schedule 9 species found on the Site, Himalayan cotoneaster, located at the southern end of the Site and along the northern Site boundary (adjacent to the former main entrance – refer to target notes 1 and 2) should be either cut back or removed and disposed of responsibly (i.e. not involving disposal in the wild).

REFERENCES & BIBLIOGRAPHY

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- Strachan, R. (1998) *Water Vole Conservation Handbook*. Wildlife Conservation Research Unit, Oxford.

Web addresses for access to full UK legislation and policy text:

Conservation of Habitats and Species Regulations 2010:

http://www.opsi.gov.uk/si/si2010/uksi_20100490_en_1

Birds Directive:

eur-lex.europa.eu/LexUriServ/site/en/consleg/1979/L/01979L0409-20070101-en

Wildlife and Countryside Act 1981:

www.opsi.gov.uk/RevisedStatutes/Acts/ukpga/1981/cukpga_19810069_en_1

Countryside and Rights of Way Act 2000:

www.legislation.hmso.gov.uk/acts/acts2000/20000037

Natural Environment and Rural Communities Act 2006:

http://www.opsi.gov.uk/acts/acts2006/ukpga_20060016_en_1

Protection of Badgers Act 1992:

http://www.opsi.gov.uk/ACTS/acts1992/ukpga_19920051_en_1

DRAWING 1 – RESULTS OF EXTENDED PHASE 1 HABITAT SURVEY



NOTES

LEGEND

- SITE BOUNDARY
- I/SI POOR SEMI-IMPROVED & IMPROVED GRASSLAND
- EARLY SUCCESSIONAL RUDERAL & BARE GROUND MOSAIC
- DENSE SCRUB
- X SCATTERED SCRUB
- INTRODUCED SHRUB
- TALL RUDERAL
- TREE
- HARD STANDING
- FENCE
- WALL
- TARGET NOTE

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BLYTHE STREET,
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EXTENDED PHASE 1
HABITAT SURVEY REPORT

RESULTS OF
EXTENDED PHASE 1
HABITAT SURVEY

DRAWING 1

SCALE
1:600 @ A3

DATE
JUNE 2015

APPENDIX A – TARGET NOTES ASSOCIATED WITH DRAWING 1

Target Note Number	Photograph	Description
1		Location of Himalayan cotoneaster (arrowed) showing signs of encroaching surrounding habitat (including hard standing!)
2	No Plate	Location of a second area supporting a growth of Himalayan cotoneaster and partly growing through the fence from an adjacent area of planted introduced shrub
3		Location of suckering wild plum invading open rank grassland.

APPENDIX B – BOTANICAL SPECIES LIST

Common Name	Latin Name	Frequency (DAFOR)
Annual meadow-grass	<i>Poa annua</i>	O-LF
Beech	<i>Fagus sylvatica</i>	R
Black medick	<i>Medicago lupulina</i>	LA
Bramble	<i>Rubus fruticosus</i>	O-LA
Broad-leaved Dock	<i>Rumex obtusifolius</i>	O
Butterfly bush	<i>Buddleja davidii</i>	R
Cleavers	<i>Galium aparine</i>	LA
Cock's-foot	<i>Dactylis glomerata</i>	LF
Colt's-foot	<i>Tussilago farfara</i>	R
Common cat's-ear	<i>Hypochaeris radicata</i>	F
Common couch	<i>Elytrigia repens</i>	O-LF
Common elder	<i>Sambucus nigra</i>	LF
Common field speedwell	<i>Veronica persica</i>	LF
Common bird's-foot trefoil	<i>Lotus corniculata</i>	R
Common figwort	<i>Scrophularia nodosa</i>	O
Common mouse-ear	<i>Cerastium fontanum</i>	F
Common nettle	<i>Urtica dioica</i>	LF-LA
Common ragwort	<i>Senecio jacobaea</i>	F
Common toadflax	<i>Linaria vulgaris</i>	LF
Common vetch	<i>Vicia sativa</i>	F
Cow parsley	<i>Anthriscus sylvestris</i>	O
Creeping bent	<i>Agrostis stolonifera</i>	LF
Creeping buttercup	<i>Ranunculus repens</i>	F
Creeping thistle	<i>Cirsium arvense</i>	F-LA
Curled dock	<i>Rumex crispus</i>	O
Cut-leaved cranesbill	<i>Geranium dissectum</i>	R
Dandelion	<i>Taraxacum officinale</i> agg.	F
Daisy	<i>Bellis perennis</i>	LF
Dog rose	<i>Rosa canina</i>	O
False oat-grass	<i>Arrhenatherum elatius</i>	LF
Fat-hen	<i>Chenopodium album</i>	LF
Feverfew	<i>Tanacetum parthenium</i>	LF
Fox-and-cubs	<i>Pilosella aurantiaca</i>	LF
Foxglove	<i>Digitalis purpurea</i>	LF
Goat willow (saplings)	<i>Salix caprea</i>	O
Great willowherb	<i>Epilobium hirsutum</i>	LF
Greater bird's-foot trefoil	<i>Lotus pedunculatus</i>	R
Greater plantain	<i>Plantago major</i>	O
Hairy tare	<i>Vicia hirsuta</i>	LF
Hedge mustard	<i>Sisymbrium officinale</i>	O
Herb Robert	<i>Geranium robertianum</i>	O-LF
Himalayan cotoneaster	<i>Cotoneaster simonsii</i>	LD
Hogweed	<i>Heracleum sphondylium</i>	O
Ivy	<i>Hedera helix</i>	LF
Lesser trefoil	<i>Trifolium dubium</i>	LA
Leyland cypress	<i>x Cupressocyparis leylandii</i>	O

Common Name	Latin Name	Frequency (DAFOR)
Medium-flowered winter-cress	<i>Barbarea intermedia</i>	LF
Melilot	<i>Melilotus sp.</i>	LF
Mugwort	<i>Artemisia vulgaris</i>	LF
Oxford ragwort	<i>Senecio squalidus</i>	O
Prickly lettuce	<i>Lactuca serriola</i>	O
Procumbent pearlwort	<i>Sagina procumbens</i>	LF
Red campion	<i>Silene dioica</i>	R
Red clover	<i>Trifolium pratense</i>	LF
Red fescue	<i>Festuca rubra</i>	LA
Red valerian	<i>Centranthus ruber</i>	R
Ribwort plantain	<i>Plantago lanceolata</i>	LA
Rough-stalked meadow-grass	<i>Poa trivialis</i>	LF
Rowan	<i>Sorbus aucuparia</i>	O
Russian comfrey	<i>Symphytum x uplandicum</i>	LF
Scented mayweed	<i>Matricaria recuitita</i>	LA
Scentless mayweed	<i>Tripleurospermum inodorum</i>	LF
Shepherd's purse	<i>Capsella bursa-pastoris</i>	LF-LA
Shrubby cinquefoil (garden cultivar)	<i>Potentilla fruticosa</i>	R
Smith's pepperwort	<i>Lepidium heterophyllum</i>	LF
Smooth sow-thistle	<i>Sonchus oleraceus</i>	O-LF
Smooth-stalked meadow-grass	<i>Poa pratensis</i>	O-LF
Soft brome	<i>Bromus hordeaceus</i>	LF
Spear thistle	<i>Cirsium vulgare</i>	LF
Swedish whitebeam	<i>Sorbus intermedia</i>	R
Sycamore	<i>Acer pseudoplatanus</i>	R
Tansy	<i>Tanacetum vulgare</i>	R
Teasel	<i>Dipsacus fullonum</i>	LF
Tufted vetch	<i>Vicia cracca</i>	LF
Variegated Japanese spindle	<i>Euonymus japonicus</i>	R
Wall speedwell	<i>Veronica arvensis</i>	LF
Weld	<i>Reseda luteola</i>	LF
White clover	<i>Trifolium repens</i>	LA-LD
White poplar (sapling)	<i>Populus alba</i>	R
Wild cherry	<i>Prunus avium</i>	LF
Wild plum	<i>Prunus domestica</i>	LF
Wormwood	<i>Artemisia absinthium</i>	O
Wood avens	<i>Geum urbanum</i>	R
Yarrow	<i>Achillea millefolium</i>	LF
Yorkshire fog	<i>Holcus lanatus</i>	F-LA
Zigzag clover	<i>Trifolium medium</i>	O-LF

APPENDIX C- BAT ROOSTING POTENTIAL CATEGORIES OF TREES

Category (Bat Potential)	Description
Grade 3 Negligible potential	Trees with no suitable features. • No cracks or crevices • No ivy cover • No deadwood in canopy or stem • No decay cavities or hollows.
Grade 2 Low potential	Trees with few suitable features noted below, only capable of supporting individual bats. • Some small cracks or crevices • Low ivy cover • Deadwood in canopy or stem • Snagged branches.
Grade 1 Moderate potential	Trees with several suitable features noted below, capable of supporting individual bats. • Woodpecker holes • Fractured limbs • Large sections of loose or flaking bark • Cavities/cracks/crevices either large in size or numerous in quantity • Crossing and rubbing branches • A hollow trunk, stem or branches • Dense ivy cover with thick stems • Tightly forked branch unions • Bat, bird or dormouse boxes • Mature, well established, profuse and thick epicormic growth.
Grade 1* High potential	Trees with multiple highly suitable features noted above, and/or capable of supporting larger roosts.
Confirmed Bat Roost	• Bats • Bat droppings • Scratch marks or staining • Desk study record of roost.

APPENDIX D- DESK STUDY DATA

Grid Ref	Location	Location Name	TextDate	Scientific Name	Common Name	BAP Species : and Country's and Amber bi		
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Lullula arborea	Woodlark	1.00	1.00	1.00
SE395021	Wombwell Golf Course pond		23/06/1991	Triturus cristatus	Great Crested Newt	1.00	1.00	0.00
SE395021	Wombwell Golf Course pond		23/06/1991	Triturus cristatus	Great Crested Newt	1.00	1.00	0.00
SE405030	Park Hill Brick Pits LWS		05/07/2013	Nyctalus noctula	Noctule	1.00	1.00	0.00
SE405030	Park Hill Brick Pits LWS		05/07/2013	Nyctalus noctula	Noctule	1.00	1.00	0.00
SE386045	Ardsley	Low laithes Cottages, 2	30/07/2000	Nyctalus noctula	Noctule	1.00	1.00	0.00
SE3904	Ardsley	Low Laithes Farm	08/07/2001	Nyctalus noctula	Noctule	1.00	1.00	0.00
SE381036	Smithley Lane Marsh		21/03/2012	Natrix natrix	Grass Snake	1.00	1.00	0.00
SE4003	Parkhill Nature Reserve LWS	Parkhill Nature Reserve 55	01/01/2005	Natrix natrix	Grass Snake	1.00	1.00	0.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	10/07/2005	Natrix natrix	Grass Snake	1.00	1.00	0.00
SE4003	Park Hill Brick Pits LWS	Parkhill LWS	10/07/2005	Natrix natrix	Grass Snake	1.00	1.00	0.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	10/07/2005	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Parkhill LWS	10/07/2005	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE386022	'BARNSELEY MBC'	Barnsley	27/01/2008	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE388034	'BARNSELEY MBC'	Barnsley	27/01/2008	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE390038	'BARNSELEY MBC'	Barnsley	27/01/2008	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE392028	'BARNSELEY MBC'	Barnsley	27/01/2008	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	18/05/2005	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE388026	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE388035	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE388040	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE393037	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2000	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE394028	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE394031	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE383047	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE399028	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE390035	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE391026	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE393037	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE391026	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE388040	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE383047	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE388026	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE388035	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE385041	Wombwell	Land off Pearson Crescent	27/02/2013	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE387024	Wombwell	Railway station	27/02/2013	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE390035	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE399028	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE394028	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00

SE394031	'BARNSELEY MBC'	Barnsley	25/01/2009	Passer domesticus	House Sparrow	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	04/11/2002	Passer montanus	Eurasian Tree Sparrow	1.00	0.00	1.00
SE3804	flood meadow, Swaithe,		01/06/2003	Perdix perdix	Grey Partridge	1.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Perdix perdix	Grey Partridge	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	10/07/2005	Perdix perdix	Grey Partridge	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Parkhill LWS	10/07/2005	Perdix perdix	Grey Partridge	1.00	0.00	1.00
SE3804	Swaithe Flood Meadow LWS	Swaithe Flood Meadows 57	01/01/2005	Perdix perdix	Grey Partridge	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2000	Perdix perdix	Grey Partridge	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Perdix perdix	Grey Partridge	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	04/11/2002	Perdix perdix	Grey Partridge	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Perdix perdix	Grey Partridge	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Perdix perdix	Grey Partridge	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	18/05/2005	Perdix perdix	Grey Partridge	1.00	0.00	1.00
SE4003	Canyon area west of DV Parkway		01/07/2002	Streptopelia turtur	Turtle Dove	1.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Emberiza citrinella	Yellowhammer	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS		06/07/2013	Emberiza citrinella	Yellowhammer	1.00	0.00	1.00
SE380037	TPT at Dove Valley	TPT east of railway viaduct	21/03/2012	Emberiza citrinella	Yellowhammer	1.00	0.00	1.00
SE381037	TPT at Dove Valley	TPT east of railway viaduct	21/03/2012	Emberiza citrinella	Yellowhammer	1.00	0.00	1.00
SE383038	TPT at Dove Valley	TPT east of railway viaduct	21/03/2012	Emberiza citrinella	Yellowhammer	1.00	0.00	1.00
SE387027	Wombwell	Fields on north-east side of railway	27/02/2013	Emberiza citrinella	Yellowhammer	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	11/01/2001	Emberiza citrinella	Yellowhammer	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	29/12/2003	Emberiza citrinella	Yellowhammer	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Emberiza citrinella	Yellowhammer	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	17/06/2005	Emberiza citrinella	Yellowhammer	1.00	0.00	1.00
SE40600326	wetlands		12/01/2002	Emberiza schoeniclus	Reed Bunting	1.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Emberiza schoeniclus	Reed Bunting	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	10/07/2005	Emberiza schoeniclus	Reed Bunting	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS		06/07/2013	Emberiza schoeniclus	Reed Bunting	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Parkhill LWS	10/07/2005	Emberiza schoeniclus	Reed Bunting	1.00	0.00	1.00
SE380036	Smithley Lane Marsh		21/03/2012	Emberiza schoeniclus	Reed Bunting	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Emberiza schoeniclus	Reed Bunting	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	17/06/2005	Emberiza schoeniclus	Reed Bunting	1.00	0.00	1.00
SE4003	Parkhill Nature Reserve LWS	Parkhill Nature Reserve 55	01/01/2005	Emberiza schoeniclus	Reed Bunting	1.00	0.00	1.00
SE3804	Swaithe Flood Meadow LWS	Swaithe Flood Meadows 57	01/01/2005	Emberiza schoeniclus	Reed Bunting	1.00	0.00	1.00
SE380033	Wombwell	Smithley	27/02/2013	Emberiza schoeniclus	Reed Bunting	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Emberiza schoeniclus	Reed Bunting	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Emberiza schoeniclus	Reed Bunting	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	29/12/2003	Emberiza schoeniclus	Reed Bunting	1.00	0.00	1.00
SE380042	flood meadow, Swaithe		01/07/1999	Vanellus vanellus	Northern Lapwing	1.00	0.00	1.00
SE3804	flood meadow, Swaithe		01/06/2003	Vanellus vanellus	Northern Lapwing	1.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Vanellus vanellus	Northern Lapwing	1.00	0.00	1.00
SE382038	Barrow Colliery Barnsley	Field north of TPT	21/03/2012	Vanellus vanellus	Northern Lapwing	1.00	0.00	1.00
SE377037	Barrow Colliery Barnsley	Field south of TPT	21/03/2012	Vanellus vanellus	Northern Lapwing	1.00	0.00	1.00
SE3804	Swaithe Flood Meadow LWS	Swaithe Flood Meadows 57	01/01/2005	Vanellus vanellus	Northern Lapwing	1.00	0.00	1.00
SE380042	Swaithe, Dove Valley Worsbrough	Fields on north side of River Dove	27/02/2013	Vanellus vanellus	Northern Lapwing	1.00	0.00	1.00

SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Vanellus vanellus	Northern Lapwing	1.00	0.00	1.00
SE384041	Aldham Mill	Disused railway (Aldham Curve)	27/02/2013	Carduelis cabaret	Lesser Redpoll	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	06/04/2004	Carduelis cabaret	Lesser Redpoll	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	24/10/2000	Carduelis cabaret	Lesser Redpoll	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Carduelis cabaret	Lesser Redpoll	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	22/12/2002	Carduelis cabaret	Lesser Redpoll	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Carduelis cabaret	Lesser Redpoll	1.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Cuculus canorus	Cuckoo	1.00	0.00	1.00
SE4003	Brickworks Pond	Wombwell Old Brick Works	27/04/2007	Cuculus canorus	Cuckoo	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	13/06/2003	Cuculus canorus	Cuckoo	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	28/06/2005	Cuculus canorus	Cuckoo	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	08/07/2004	Cuculus canorus	Cuckoo	1.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Locustella naevia	Grasshopper Warbler	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	10/07/2005	Locustella naevia	Grasshopper Warbler	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Parkhill LWS	10/07/2005	Locustella naevia	Grasshopper Warbler	1.00	0.00	1.00
SE4003	Parkhill Nature Reserve LWS	Parkhill Nature Reserve 55	01/01/2005	Locustella naevia	Grasshopper Warbler	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	24/04/2002	Locustella naevia	Grasshopper Warbler	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	17/07/2005	Locustella naevia	Grasshopper Warbler	1.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	07/09/2002	Muscicapa striata	Spotted Flycatcher	1.00	0.00	1.00
SE405030	Park Hill Brick Pits LWS		05/07/2013	Pipistrellus pipistrellus 55kHz	55 Khz Pipistrelle	1.00	0.00	0.00
SE405030	Park Hill Brick Pits LWS		05/07/2013	Pipistrellus pipistrellus 55kHz	55 Khz Pipistrelle	1.00	0.00	0.00
SE3802	Worsbrough		21/05/2004	Lepus europaeus	Brown Hare	1.00	0.00	0.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2005	Tyria jacobaeae	Cinnabar	1.00	0.00	0.00
SE3904	Netherwood CP, Dearne valley		01/02/1998	Regulus ignicapillus	Firecrest	0.00	1.00	1.00
SE3904	Netherwood Marsh NR		29/12/1991	Turdus iliacus	Redwing	0.00	1.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Turdus iliacus	Redwing	0.00	1.00	1.00
SE378034	Wombwell	Smithley	27/02/2013	Turdus iliacus	Redwing	0.00	1.00	1.00
SE384028	Wombwell	Fields on north-east side of railway	27/02/2013	Turdus iliacus	Redwing	0.00	1.00	1.00
SE384041	Aldham Mill	Disused railway (Aldham Curve)	27/02/2013	Turdus iliacus	Redwing	0.00	1.00	1.00
SE379037	Dove Valley	TPT east of railway viaduct	27/02/2013	Turdus iliacus	Redwing	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Turdus iliacus	Redwing	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Turdus iliacus	Redwing	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Turdus iliacus	Redwing	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	12/12/2004	Turdus iliacus	Redwing	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	27/01/2005	Turdus iliacus	Redwing	0.00	1.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Turdus pilaris	Fieldfare	0.00	1.00	1.00
SE378034	Wombwell	Smithley	27/02/2013	Turdus pilaris	Fieldfare	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Turdus pilaris	Fieldfare	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Turdus pilaris	Fieldfare	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Turdus pilaris	Fieldfare	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	12/12/2004	Turdus pilaris	Fieldfare	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	04/01/2005	Turdus pilaris	Fieldfare	0.00	1.00	1.00
SE4003	Canyon area west of DV Parkway		01/02/1999	Tyto alba	Barn Owl	0.00	1.00	1.00
SE4003	Canyon area west of DV Parkway		01/01/2003	Tyto alba	Barn Owl	0.00	1.00	1.00
SE3804	Swaithe Flood Meadow LWS	Swaithe Flood Meadows 57	01/01/2005	Tyto alba	Barn Owl	0.00	1.00	1.00

SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2000	Tyto alba	Barn Owl	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Tyto alba	Barn Owl	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Tyto alba	Barn Owl	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Tyto alba	Barn Owl	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	23/10/2004	Tyto alba	Barn Owl	0.00	1.00	1.00
SE386034	Cudworth	18 Newton Av	25/09/2003	Falco columbarius	Merlin	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	13/11/2001	Falco columbarius	Merlin	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	17/09/2000	Pandion haliaetus	Osprey	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Pandion haliaetus	Osprey	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/04/2002	Pandion haliaetus	Osprey	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	09/04/2005	Pandion haliaetus	Osprey	0.00	1.00	1.00
SE3904	Mitchell's Main Muck Stack		06/07/2013	Anser anser	Greylag Goose	0.00	1.00	1.00
SE397039	Netherwood Country Park	Pond, S side of Bradberry Balk Lane	27/02/2013	Anser anser	Greylag Goose	0.00	1.00	1.00
SE397041	Netherwood Marsh NR	Pond, NE side of Netherwood Road	27/02/2013	Anser anser	Greylag Goose	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	11/10/2003	Anser anser	Greylag Goose	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	06/07/2013	Alcedo atthis	Kingfisher	0.00	1.00	1.00
SE3904	Netherwood Marsh NR		08/03/1992	Alcedo atthis	Kingfisher	0.00	1.00	1.00
SE377036	'BARNSELEY MBC'	River Dove	21/03/2012	Alcedo atthis	Kingfisher	0.00	1.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Alcedo atthis	Kingfisher	0.00	1.00	1.00
SE396041	Netherwood Marsh NR	River Dove	27/02/2013	Alcedo atthis	Kingfisher	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	05/02/2000	Alcedo atthis	Kingfisher	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Alcedo atthis	Kingfisher	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Alcedo atthis	Kingfisher	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Alcedo atthis	Kingfisher	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	04/12/2001	Alcedo atthis	Kingfisher	0.00	1.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	22/07/2005	Alcedo atthis	Kingfisher	0.00	1.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Falco peregrinus	Peregrine	0.00	1.00	1.00
SE3804	'BARNSELEY MBC'	Aldham Junction Ardsley	22/09/1992	Pipistrellus pipistrellus	Pipistrelle	0.00	1.00	0.00
SE405031	Wombwell	Park Hill Brickworks	14/09/1992	Myotis daubentoni	Daubenton's Bat	0.00	1.00	0.00
SE405031	Wombwell	Park Hill Brickworks	23/09/1992	Myotis daubentoni	Daubenton's Bat	0.00	1.00	0.00
SE405031	Wombwell	Park Hill Brickworks	12/10/1992	Myotis daubentoni	Daubenton's Bat	0.00	1.00	0.00
SE405031	Wombwell	Park Hill Brickworks	09/02/1993	Myotis daubentoni	Daubenton's Bat	0.00	1.00	0.00
SE405031	Wombwell	Park Hill Brickworks	17/03/1993	Myotis daubentoni	Daubenton's Bat	0.00	1.00	0.00
SE405031	Wombwell	Park Hill Brickworks	21/04/1993	Myotis daubentoni	Daubenton's Bat	0.00	1.00	0.00
SE405031	Wombwell	Park Hill Brickworks	27/05/1993	Myotis daubentoni	Daubenton's Bat	0.00	1.00	0.00
SE405031	Wombwell	Park Hill Brickworks	23/03/1994	Myotis daubentoni	Daubenton's Bat	0.00	1.00	0.00
SE405031	Wombwell	Park Hill Brickworks	11/04/1994	Myotis daubentoni	Daubenton's Bat	0.00	1.00	0.00
SE405031	Wombwell	Park Hill Brickworks	29/03/2001	Myotis daubentoni	Daubenton's Bat	0.00	1.00	0.00
SE4003	Park Hill Brick Pits LWS	Parkhill LWS	01/03/1993	Myotis daubentoni	Daubenton's Bat	0.00	1.00	0.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	16/07/2001	Falco subbuteo	Eurasian Hobby	0.00	1.00	0.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Regulus regulus	Goldcrest	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2000	Regulus regulus	Goldcrest	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Regulus regulus	Goldcrest	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	06/12/2002	Regulus regulus	Goldcrest	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Regulus regulus	Goldcrest	0.00	0.00	1.00

SE4003	Park Hill Brick Pits LWS	Park Hill LWS	20/03/2005	Regulus regulus	Goldcrest	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Regulus regulus	Goldcrest	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	08/08/2001	Riparia riparia	Sand Martin	0.00	0.00	1.00
SE3804	Aldham Mill	Aldham Bridge	01/01/1975	Riparia riparia	Sand Martin	0.00	0.00	1.00
SE4003	Brickworks Pond		01/01/2002	Saxicola torquata	Stonechat	0.00	0.00	1.00
SE40580330	Park Hill, Brick Pit near Broomhill		12/01/2002	Saxicola torquata	Stonechat	0.00	0.00	1.00
SE4003	Brickworks Pond		01/10/2002	Saxicola torquata	Stonechat	0.00	0.00	1.00
SE4003	Brickworks Pond		01/11/2002	Saxicola torquata	Stonechat	0.00	0.00	1.00
SE4003	Brickworks Pond		01/01/2003	Saxicola torquata	Stonechat	0.00	0.00	1.00
SE4003	Brickworks Pond		01/03/2003	Saxicola torquata	Stonechat	0.00	0.00	1.00
SE4003	Brickworks Pond		01/10/2003	Saxicola torquata	Stonechat	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	04/01/2002	Saxicola torquata	Stonechat	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Saxicola torquata	Stonechat	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	12/10/2001	Saxicola torquata	Stonechat	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	04/12/2004	Saxicola torquata	Stonechat	0.00	0.00	1.00
SE397029	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE383047	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE399028	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE384045	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE390035	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE388035	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE393037	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	18/05/2005	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	11/10/2003	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE394028	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE394031	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE397029	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE393037	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE383047	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE384045	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2000	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE392028	'BARNSELEY MBC'	Barnsley	27/01/2008	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE399028	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE388035	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE394028	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE394031	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE30W	Netherwood Marsh NR		25/10/1992	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE390035	'BARNSELEY MBC'	Barnsley	25/01/2009	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE383045	'BARNSELEY MBC'	Barnsley	27/01/2008	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE388034	'BARNSELEY MBC'	Barnsley	27/01/2008	Sturnus vulgaris	Common Starling	0.00	0.00	1.00
SE380042	flood meadow, Swaithe	'8 Locks'	04/07/1999	Turdus philomelos	Song Thrush	0.00	0.00	1.00

SE4003	Park Hill Brick Pits LWS	Park Hill LWS	06/07/2013	Turdus philomelos	Song Thrush	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Turdus philomelos	Song Thrush	0.00	0.00	1.00
SE4003	Parkhill Nature Reserve LWS	Parkhill Nature Reserve 55	01/01/2005	Turdus philomelos	Song Thrush	0.00	0.00	1.00
SE403031	Wombwell	TPT btwn Station Rd & Everill Gate Ln	27/02/2013	Turdus philomelos	Song Thrush	0.00	0.00	1.00
SE380033	Wombwell	Smithley	27/02/2013	Turdus philomelos	Song Thrush	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	18/05/2005	Turdus philomelos	Song Thrush	0.00	0.00	1.00
SE387024	Wombwell	Railway station	27/02/2013	Turdus philomelos	Song Thrush	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	03/01/2000	Turdus philomelos	Song Thrush	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Turdus philomelos	Song Thrush	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Turdus philomelos	Song Thrush	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Turdus philomelos	Song Thrush	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	12/12/2004	Turdus philomelos	Song Thrush	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Turdus viscivorus	Mistle Thrush	0.00	0.00	1.00
SE382037	TPT at Dove Valley	TPT east of railway viaduct	21/03/2012	Turdus viscivorus	Mistle Thrush	0.00	0.00	1.00
SE384028	Wombwell	Fields on north-east side of railway	27/02/2013	Turdus viscivorus	Mistle Thrush	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Turdus viscivorus	Mistle Thrush	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Turdus viscivorus	Mistle Thrush	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Turdus viscivorus	Mistle Thrush	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	12/12/2004	Turdus viscivorus	Mistle Thrush	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	18/05/2005	Turdus viscivorus	Mistle Thrush	0.00	0.00	1.00
SE4003	Brickworks Pond		11/09/2002	Phoenicurus phoenicurus	Common Redstart	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	11/09/2002	Phoenicurus phoenicurus	Common Redstart	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	06/07/2013	Phylloscopus trochilus	Willow Warbler	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Phylloscopus trochilus	Willow Warbler	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/09/2000	Phylloscopus trochilus	Willow Warbler	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Phylloscopus trochilus	Willow Warbler	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Phylloscopus trochilus	Willow Warbler	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	29/09/2003	Phylloscopus trochilus	Willow Warbler	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	30/07/2005	Phylloscopus trochilus	Willow Warbler	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Picus viridis	Green Woodpecker	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	05/01/2002	Picus viridis	Green Woodpecker	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Picus viridis	Green Woodpecker	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	21/10/2004	Picus viridis	Green Woodpecker	0.00	0.00	1.00
SE381037	TPT at Dove Valley	TPT east of railway viaduct	21/03/2012	Prunella modularis	Dunnock	0.00	0.00	1.00
SE382037	TPT at Dove Valley	TPT east of railway viaduct	21/03/2012	Prunella modularis	Dunnock	0.00	0.00	1.00
SE4003	Parkhill Nature Reserve LWS	Parkhill Nature Reserve 55	01/01/2005	Prunella modularis	Dunnock	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2000	Prunella modularis	Dunnock	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	26/05/2004	Prunella modularis	Dunnock	0.00	0.00	1.00
SE399028	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE390035	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE394028	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE394031	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE387023	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE388040	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE393037	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00

SE397030	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE383047	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE384045	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE386021	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE387023	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE397030	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE399028	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE386021	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE383047	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE384045	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE390035	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE393037	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE388040	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Prunella modularis	Dunnock	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Prunella modularis	Dunnock	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Prunella modularis	Dunnock	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	18/05/2005	Prunella modularis	Dunnock	0.00	0.00	1.00
SE394028	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE394031	'BARNSELEY MBC'	Barnsley	25/01/2009	Prunella modularis	Dunnock	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Pyrrhula pyrrhula	Common Bullfinch	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	10/07/2005	Pyrrhula pyrrhula	Common Bullfinch	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS		06/07/2013	Pyrrhula pyrrhula	Common Bullfinch	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Parkhill LWS	10/07/2005	Pyrrhula pyrrhula	Common Bullfinch	0.00	0.00	1.00
SE380037	TPT at Dove Valley	TPT east of railway viaduct	21/03/2012	Pyrrhula pyrrhula	Common Bullfinch	0.00	0.00	1.00
SE387024	Wombwell	Railway station	27/02/2013	Pyrrhula pyrrhula	Common Bullfinch	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	29/12/2003	Pyrrhula pyrrhula	Common Bullfinch	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Pyrrhula pyrrhula	Common Bullfinch	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	28/06/2005	Pyrrhula pyrrhula	Common Bullfinch	0.00	0.00	1.00
SE396040	Netherwood Country Park	Scrub near car park	27/02/2013	Pyrrhula pyrrhula	Common Bullfinch	0.00	0.00	1.00
SE383042	Aldham Mill	Disused railway (Aldham Curve)	27/02/2013	Pyrrhula pyrrhula	Common Bullfinch	0.00	0.00	1.00
SE384041	Aldham Mill	Disused railway (Aldham Curve)	27/02/2013	Pyrrhula pyrrhula	Common Bullfinch	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Pyrrhula pyrrhula	Common Bullfinch	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	16/01/2000	Pyrrhula pyrrhula	Common Bullfinch	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Pyrrhula pyrrhula	Common Bullfinch	0.00	0.00	1.00
SE4003	Brickworks Pond		01/01/2002	Rallus aquaticus	Water Rail	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Rallus aquaticus	Water Rail	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Rallus aquaticus	Water Rail	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Rallus aquaticus	Water Rail	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	29/12/2003	Rallus aquaticus	Water Rail	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Rallus aquaticus	Water Rail	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	12/04/2005	Rallus aquaticus	Water Rail	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	17/01/2004	Larus fuscus	Lesser Black-backed Gull	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	02/01/2001	Larus fuscus	Lesser Black-backed Gull	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	08/02/2004	Anas strepera	Gadwall	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	31/05/2002	Anas strepera	Gadwall	0.00	0.00	1.00

SE4003	Park Hill Brick Pits LWS	Park Hill LWS	06/06/2005	Anas strepera	Gadwall	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	11/10/2003	Anas strepera	Gadwall	0.00	0.00	1.00
SE3904	Netherwood Marsh NR		29/12/1991	Larus canus	Common Gull	0.00	0.00	1.00
SE3904	Netherwood Marsh NR		02/02/1992	Larus canus	Common Gull	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Haematopus ostralegus	Eurasian Oystercatcher	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	07/05/2004	Haematopus ostralegus	Eurasian Oystercatcher	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	15/01/2004	Pluvialis apricaria	European Golden Plover	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Aythya ferina	Common Pochard	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	11/10/2003	Aythya ferina	Common Pochard	0.00	0.00	1.00
SE3804	flood meadow, Swaithe		02/03/2003	Gallinago gallinago	Common Snipe	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	28/01/2001	Gallinago gallinago	Common Snipe	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	22/02/2003	Gallinago gallinago	Common Snipe	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	02/12/2003	Larus argentatus	Herring Gull	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	07/01/2004	Larus argentatus	Herring Gull	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	16/01/2005	Larus argentatus	Herring Gull	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Anas penelope	Wigeon	0.00	0.00	1.00
SE3904	Netherwood Marsh NR		29/12/1991	Anas crecca	Eurasian Teal	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Anas crecca	Eurasian Teal	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2000	Anas crecca	Eurasian Teal	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	29/12/2003	Anas crecca	Eurasian Teal	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Anas crecca	Eurasian Teal	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	12/04/2005	Anas crecca	Eurasian Teal	0.00	0.00	1.00
SE4003	Brickworks Pond		01/11/1999	Lymnocyptes minimus	Jack Snipe	0.00	0.00	1.00
SE3804	flood meadow, Swaithe		02/03/2003	Lymnocyptes minimus	Jack Snipe	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	11/12/2002	Lymnocyptes minimus	Jack Snipe	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	17/03/2001	Lymnocyptes minimus	Jack Snipe	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	23/03/2003	Lymnocyptes minimus	Jack Snipe	0.00	0.00	1.00
SE30W	BTO, Barnsley		01/04/1989	Parus montanus	Willow Tit	0.00	0.00	1.00
SE4003	Parkhill Nature Reserve LWS	Parkhill Nature Reserve 55	01/01/2005	Parus montanus	Willow Tit	0.00	0.00	1.00
SE382037	Wombwell	Disused railway near Smithley Lane	27/02/2013	Parus montanus	Willow Tit	0.00	0.00	1.00
SE383043	Aldham Mill	Disused railway (Aldham Curve)	27/02/2013	Parus montanus	Willow Tit	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Poecile montanus	Willow Tit	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Poecile montanus	Willow Tit	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	29/12/2003	Poecile montanus	Willow Tit	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Poecile montanus	Willow Tit	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	30/07/2005	Poecile montanus	Willow Tit	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Alauda arvensis	Skylark	0.00	0.00	1.00
SE3802	Worsbrough		29/04/2004	Alauda arvensis	Skylark	0.00	0.00	1.00
SE3802	Worsbrough		21/05/2004	Alauda arvensis	Skylark	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	10/07/2005	Alauda arvensis	Skylark	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Parkhill LWS	10/07/2005	Alauda arvensis	Skylark	0.00	0.00	1.00
SE3804	Swaithe Flood Meadow LWS	Swaithe Flood Meadows 57	01/01/2005	Alauda arvensis	Skylark	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	10/08/2001	Alauda arvensis	Sky Lark	0.00	0.00	1.00
SE382032	Wombwell	Fields on north-east side of railway	27/02/2013	Alauda arvensis	Skylark	0.00	0.00	1.00
SE384031	Wombwell	Fields on north-east side of railway	27/02/2013	Alauda arvensis	Skylark	0.00	0.00	1.00

SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Alauda arvensis	Sky Lark	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Alauda arvensis	Sky Lark	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	17/06/2005	Alauda arvensis	Sky Lark	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	21/10/2004	Alauda arvensis	Sky Lark	0.00	0.00	1.00
SE30W	Netherwood Marsh NR		25/10/1992	Anas clypeata	Shoveler	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2000	Anas clypeata	Shoveler	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Anas clypeata	Shoveler	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Anas clypeata	Shoveler	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	06/06/2005	Anas clypeata	Shoveler	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Anser brachyrhynchus	Pink-footed Goose	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	13/10/2001	Anser brachyrhynchus	Pink-footed Goose	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Anser brachyrhynchus	Pink-footed Goose	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	10/11/2003	Anser brachyrhynchus	Pink-footed Goose	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	16/01/2005	Anser brachyrhynchus	Pink-footed Goose	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Anthus pratensis	Meadow Pipit	0.00	0.00	1.00
SE377038	TPT at Dove Valley	TPT east of railway viaduct	21/03/2012	Anthus pratensis	Meadow Pipit	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Anthus pratensis	Meadow Pipit	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	17/01/2000	Anthus pratensis	Meadow Pipit	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Anthus pratensis	Meadow Pipit	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	21/10/2004	Anthus pratensis	Meadow Pipit	0.00	0.00	1.00
SE4003	Brickworks Pond		01/11/2000	Asio flammeus	Short-Eared Owl	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	21/11/2000	Asio flammeus	Short-eared Owl	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Carduelis cannabina	Common Linnet	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	05/01/2002	Carduelis cannabina	Common Linnet	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Carduelis cannabina	Common Linnet	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	18/05/2005	Carduelis cannabina	Common Linnet	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	26/09/2003	Carduelis cannabina	Common Linnet	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	08/08/2001	Carduelis cannabina	Common Linnet	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS		06/07/2013	Columba oenas	Stock Dove	0.00	0.00	1.00
SE380044	Swaithe, Dove Valley Worsbrough	Former canal locks	27/02/2013	Columba oenas	Stock Dove	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Columba oenas	Stock Dove	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	29/06/2003	Columba oenas	Stock Dove	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Columba oenas	Stock Dove	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	18/05/2005	Columba oenas	Stock Dove	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Delichon urbica	House Martin	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Delichon urbica	House Martin	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Delichon urbica	House Martin	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	17/06/2005	Delichon urbica	House Martin	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	08/08/2001	Delichon urbica	House Martin	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	03/10/2004	Delichon urbica	House Martin	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Falco tinnunculus	Kestrel	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2000	Falco tinnunculus	Kestrel	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2001	Falco tinnunculus	Kestrel	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	07/07/2003	Falco tinnunculus	Kestrel	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Falco tinnunculus	Kestrel	0.00	0.00	1.00

SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Falco tinnunculus	Kestrel	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	18/05/2005	Falco tinnunculus	Kestrel	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	13/04/2003	Grus grus	Common Crane	0.00	0.00	1.00
SE380042	flood meadow, Swaithe		09/07/1999	Hirundo rustica	Swallow	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Hirundo rustica	Swallow	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	15/04/2003	Hirundo rustica	Swallow	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Hirundo rustica	Swallow	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2004	Hirundo rustica	Swallow	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	17/06/2005	Hirundo rustica	Swallow	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	10/08/2001	Hirundo rustica	Swallow	0.00	0.00	1.00
SE3903	Netherwood CP, Dearne valley		29/12/1991	Motacilla cinerea	Grey Wagtail	0.00	0.00	1.00
SE3904	Netherwood Marsh NR		10/10/1993	Motacilla cinerea	Grey Wagtail	0.00	0.00	1.00
SE3904	Netherwood Marsh NR	Netherwood Marsh	01/01/1992	Motacilla cinerea	Grey Wagtail	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2003	Motacilla cinerea	Grey Wagtail	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	20/11/2004	Motacilla cinerea	Grey Wagtail	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	06/01/2001	Motacilla cinerea	Grey Wagtail	0.00	0.00	1.00
SE4003	Park Hill Brick Pits LWS	Park Hill LWS	01/01/2002	Motacilla cinerea	Grey Wagtail	0.00	0.00	1.00
SE3903	Netherwood CP, Dearne valley		01/03/1998	Motacilla flava	Yellow Wagtail	0.00	0.00	1.00
SE383038	'BARNSELEY MBC'	TPT Dove Valley	21/03/2012	Meles meles	Badger	0.00	0.00	0.00
SE383042	Aldham Mill	Disused railway (Aldham Curve)	27/02/2013	Meles meles	Badger	0.00	0.00	0.00
SE380031	Wombwell	Smithley	27/02/2013	Meles meles	Badger	0.00	0.00	0.00
SE383042	River Dove	North bank of River Dove	21/03/2012	Meles meles	Badger	0.00	0.00	0.00
SE396032	Wombwell	York Street, 11	13/07/2000	Chiroptera	Bats	0.00	0.00	0.00
SE388048	'BARNSELEY MBC'	Low Laithes Farm	14/06/2004	Pipistrellus pipistrellus 45kHz	45 Khz Pipistrelle	0.00	0.00	0.00
SE385045	Ardsley	Low Laithes Cottages, 1	07/07/2004	Pipistrellus pipistrellus 45kHz	45 Khz Pipistrelle	0.00	0.00	0.00
SE388048	Ardsley	Low Laithes Farm	14/06/2004	Pipistrellus pipistrellus 45kHz	45 Khz Pipistrelle	0.00	0.00	0.00
SE405030	Park Hill Brick Pits LWS		05/07/2013	Pipistrellus pipistrellus 45kHz	45 Khz Pipistrelle	0.00	0.00	0.00
SE405030	Park Hill Brick Pits LWS		05/07/2013	Pipistrellus pipistrellus 45kHz	45 Khz Pipistrelle	0.00	0.00	0.00
SE405030	Park Hill Brick Pits LWS		05/07/2013	Myotis	Unidentified Bat	0.00	0.00	0.00
SE405030	Park Hill Brick Pits LWS		05/07/2013	Myotis	Unidentified Bat	0.00	0.00	0.00
SE405030	'BARNSELEY MBC'	Parkhill	06/06/2007	Arvicola terrestris	Water Vole			
SE405034	'BARNSELEY MBC'	Parkhill	06/06/2007	Arvicola terrestris	Water Vole			
SE405034	Parkhill Nature Reserve LWS	Parkhill	06/06/2007	Arvicola terrestris	Water Vole			
SE405030	Parkhill Nature Reserve LWS	Parkhill	06/06/2007	Arvicola terrestris	Water Vole			
SE4003	Bulling Dike	Bulling Dyke	01/05/2000	Arvicola terrestris	Water Vole			
SE4003	Park Hill Brick Pits LWS	Parkhill LWS	10/07/2005	Arvicola terrestris	Water Vole			
SE395043		River Dove, South Yorkshire	28/06/2001	Arvicola terrestris	Water Vole			
SE395043		River Dove, South Yorkshire	28/06/2001	Arvicola terrestris	Water Vole			
SE395043	'BARNSELEY MBC'	River Dove	28/06/2001	Arvicola terrestris	Water Vole			
SE4003	Parkhill Nature Reserve LWS	Parkhill Nature Reserve 55	01/01/2005	Arvicola terrestris	Water Vole			



29. Wombwell Wood

LWS Assessment and Phase 1 Survey

Prepared by
TEP

for

Barnsley Metropolitan Borough Council

January 2011
(Edited December 2011)

Genesis Centre
Birchwood Science Park
Warrington
WA3 7BH

T: 01925 844004
F: 01925 844002
E: tep@tep.uk.com
W: www.tep.uk.com



Site Name:	Wombwell Wood
Site Area:	106.59
Survey Date:	August 2010
Nearest Settlement:	Wombwell, Hoyland, Worsbrough
Grid Reference at Centre:	SE37789, 02641
Surveyor(s)	PG, VG

Site Description:

This is a large block of woodland and plantation which extends along a north-west to southeast axis across a largely agricultural landscape. The wood and surrounding fields are almost entirely enclosed by the settlements of Worsbrough, Wombwell and Hoyland.

Comprising more than 100ha of woodland this is one of the largest woodland areas in the Barnsley area and is contiguous to other blocks and strips of woodland in the north. It is associated, along its north boundary, with a disused railway line and, to the north of this, the valley of the River Dove.

Considering the density of human settlement in this area, this is a well-wooded part of Barnsley. The majority of the woodland designated within the Local Wildlife Site is, or has been, woodland of long-standing. Around 20% of the area has been replanted, mainly with beech (*Fagus sylvatica*), but the great majority of the semi-natural woodland here is included on the national register of ancient and semi-natural woodland sites. Most of the woodland vegetation matches the national NVC type W16a - the oak sub-community of oak-birch- wavy hair-grass woodland, typical of acidic conditions in coal measures landscapes. Much of the woodland is typical of this type, with a canopy of oak (*Quercus robur*), silver birch (*Betula pendula*) and downy birch (*B. pubescens*) over a species-poor ground layer dominated by wavy hair-grass (*Deschampsia flexuosa*), Yorkshire fog (*Holcus lanatus*) and bracken (*Pteridium aquilinum*).

Some areas in the northern fringes of TN15 area retain tiny vestiges of former heather (*Calluna vulgaris*) heath, but these are now rare. Also in the northern area are various gaps in the canopy where neutral grassland and tall herb communities survive (TN17, TN18, TN19, T20). Due to lack of management intervention, however, these are rapidly closing over under natural succession of the vegetation to woodland. The central part of the semi-natural woodland area (TN5) has the added diversity of the fishing ponds with areas of open water and some swampy vegetation (TN7).

The second most extensive vegetation type on this site is well-established broadleaved plantation, generally dominated by tall and mature beech (*Fagus sylvatica*). This species forms a dense canopy casting very heavy shade, so that large areas have next to no ground vegetation but are dominated by beech leaf litter.

Important Species:

Bluebell (*Hyacinthoides non-scripta*), remote sedge (*Carex remota*), dog's mercury (*Mercurialis perennis*) and greater stitchwort (*Stellaria holostea*) are all present on the site and are ancient woodland indicator species for South Yorkshire.

UKBAP herptile species found on site are adder (*Vipera berus*) and common lizard (*Zootoca vivipara*).

UKBAP breeding bird species include song thrush (*Turdus philomelos*), dunnoek (*Prunella modularis*), willow tit (*Poecile Montana*) and bullfinch (*Pyrrhulla pyrrhulla*).

Target Note:	TN1
Habitat:	Continuous bracken
Species List:	
A narrow strip dominated by dense continuous bracken which runs through broadleaved woodland beneath electricity lines. Parts of the bracken ride are being colonised by woody regeneration from adjoining woodlands (TN14, TN15 and TN16).	
No species list recorded	

Target Note:	TN2	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Betula pendula</i>	Silver Birch	A
<i>Quercus robur</i>	English Oak	A
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Pteridium aquilinum</i>	Bracken	F
<i>Corylus avellana</i>	Hazel	O
<i>Prunus padus</i>	Bird Cherry	O
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN3	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Quercus robur</i>	English Oak	D
<i>Betula pendula</i>	Silver Birch	A
<i>Holcus mollis</i>	Creeping Soft-grass	F
<i>Pteridium aquilinum</i>	Bracken	F
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Castanea sativa</i>	Sweet Chestnut	O
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	O
<i>Fagus sylvatica</i>	Beech	O
<i>Agrostis capillaris</i>	Common Bent	R
<i>Dryopteris dilatata</i>	Broad Buckler-fern	R
<i>Hedera helix</i>	Ivy	R
<i>Hyacinthoides non-scripta</i>	Bluebell	R
<i>Ilex aquifolium</i>	Holly	R
<i>Juncus effusus</i>	Soft Rush	R
<i>Sorbus aucuparia</i>	Rowan	R
<i>Urtica dioica</i>	Nettle	R
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN4		
Habitat:	Semi-natural broadleaved woodland (understory and groundflora species)		
Species List:			
Scientific Name	Common Name	Frequency	

<i>Acer pseudoplatanus</i>	Sycamore	R
<i>Arctium minus</i>	Lesser Burdock	R
<i>Arrhenatherum elatius</i>	False Oat-grass	R
<i>Blechnum spicant</i>	Hard Fern	R
<i>Brachypodium sylvaticum</i>	False Brome	R
Carex remota	Remote Sedge	R
<i>Corylus avellana</i>	Hazel	R
<i>Digitalis purpurea</i>	Foxglove	R
<i>Glechoma hederacea</i>	Ground-ivy	R
Mercurialis perennis	Dog's Mercury	R
<i>Prunus avium</i>	Wild Cherry	R
<i>Rubus idaeus</i>	Raspberry	R
<i>Sambucus nigra</i>	Elder	R
Stellaria holostea	Greater Stitchwort	R
<i>Teucrium scorodonium</i>	Woodsage	R
<i>Vaccinium myrtillus</i>	Bilberry	R
<i>Viola riviniana</i>	Wood-dog-violet	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN5	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Rubus fruticosus</i> agg.	Bramble	D
<i>Pteridium aquilinum</i>	Bracken	A
<i>Holcus mollis</i>	Creeping Soft-grass	F
<i>Alliaria petiolata</i>	Garlic Mustard	O
<i>Chamerion angustifolium</i>	Rosebay Willowherb	O
<i>Dactylis glomerata</i>	Cock's-foot	O
<i>Epilobium montanum</i>	Broad-leaved Willowherb	O
<i>Galium aparine</i>	Cleavers	O
<i>Geranium robertianum</i>	Herb-Robert	O
<i>Geum urbanum</i>	Wood Avens	O
<i>Juncus effusus</i>	Soft Rush	O
<i>Lolium perenne</i>	Ryegrass	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Urtica dioica</i>	Nettle	O
<i>Arctium minus</i>	Lesser Burdock	R
<i>Blechnum spicant</i>	Hard Fern	R
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	R
<i>Elytrigia repens</i>	Common Couch	R
<i>Festuca gigantea</i>	Giant Fescue	R
<i>Plantago major</i>	Greater Plantain	R
<i>Stachys sylvatica</i>	Hedge Woundwort	R
<i>Symphytum x uplandicum</i>	Russian Comfrey	R
<i>Taraxacum officinale</i> agg.	Dandelion	R
<i>Teucrium scorodonium</i>	Woodsage	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN6		
Habitat:	Tall ruderal herb		
Species List:			
Scientific Name	Common Name	Frequency	
<i>Reseda luteola</i>	Weld	D	
<i>Fallopia japonica</i>	Japanese Knotweed	F	
<i>Sisymbrium officinale</i>	Hedge Mustard	F	
<i>Agrostis stolonifera</i>	Creeping Bent	O	
<i>Alliaria petiolata</i>	Garlic Mustard	O	
<i>Cirsium arvense</i>	Creeping Thistle	O	
<i>Silene latifolia</i>	White Campion	O	
<i>Symphytum x uplandicum</i>	Russian Comfrey	O	
<i>Tripleurospermum inodorum</i>	Scentless Mayweed	O	
<i>Artemisia vulgaris</i>	Mugwort	R	

<i>Papaver rhoeas</i>	Common Poppy	R
<i>Rumex obtusifolius</i>	Broad-leaved Dock	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN7	
Habitat:	Swamp	
Species List:		
Scientific Name	Common Name	Frequency
<i>Glyceria maxima</i>	Reed Sweet-grass	D
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Rumex crispus</i>	Curled Dock	O
<i>Senecio aquaticus</i>	Marsh Ragwort	O
<i>Juncus effusus</i>	Soft Rush	R
<i>Salix cinerea</i>	Grey Willow	R
<i>Typha latifolia</i>	Greater Reedmace	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN8	
Habitat:	Broadleaved plantation	
Species List:		
Scientific Name	Common Name	Frequency
<i>Fagus sylvatica</i>	Beech	D
<i>Agrostis capillaris</i>	Common Bent	O
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Arrhenatherum elatius</i>	False Oat-grass	R
<i>Chamerion angustifolium</i>	Rosebay Willowherb	R
<i>Dactylis glomerata</i>	Cock's-foot	R
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	R
<i>Epilobium hirsutum</i>	Great Willowherb	R
<i>Epilobium sp.</i>	Willowherb species	R
<i>Juncus effusus</i>	Soft Rush	R
<i>Rubus fruticosus agg.</i>	Bramble	R
<i>Rumex obtusifolius</i>	Broad-leaved Dock	R
<i>Taraxacum sp.</i>	Dandelion species	R
<i>Urtica dioica</i>	Nettle	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN9	
Habitat:	Tall ruderal herb	
Species List:		
Scientific Name	Common Name	Frequency
<i>Urtica dioica</i>	Nettle	D
<i>Holcus lanatus</i>	Yorkshire-fog	F
<i>Agrostis capillaris</i>	Common Bent	O
<i>Agrostis stolonifera</i>	Creeping Bent	O
<i>Arrhenatherum elatius</i>	False Oat-grass	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Dactylis glomerata</i>	Cock's-foot	O
<i>Epilobium hirsutum</i>	Great Willowherb	O

<i>Poa trivialis</i>	Rough Meadow-grass	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Sambucus nigra</i>	Elder	O
<i>Anthriscus sylvestris</i>	Cow Parsley	R
<i>Juncus conglomeratus</i>	Compact Rush	R
<i>Juncus effusus</i>	Soft Rush	R
<i>Lolium perenne</i>	Ryegrass	R
<i>Plantago lanceolata</i>	Ribwort Plantain	R
<i>Plantago major</i>	Greater Plantain	R
<i>Poa annua</i>	Annual Meadow-grass	R
<i>Polygonum aviculare</i>	Knotgrass	R
<i>Ranunculus repens</i>	Creeping Buttercup	R
<i>Salix caprea</i>	Goat Willow	R
<i>Trifolium repens</i>	White Clover	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN10	
Habitat:	Broadleaved plantation	
Species List:		
Scientific Name	Common Name	Frequency
<i>Fagus sylvatica</i>	Beech	A
<i>Holcus mollis</i>	Creeping Soft-grass	F
<i>Pinus sylvestris</i>	Scots Pine	F
<i>Quercus robur</i>	English Oak	F
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Agrostis capillaris</i>	Common Bent	O
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Dryopteris dilatata</i>	Broad Buckler-fern	O
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Hyacinthoides non-scripta</i>	Bluebell	O
<i>Pinus nigra</i>	Black Pine	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Sambucus nigra</i>	Elder	O
<i>Arrhenatherum elatius</i>	False Oat-grass	R
<i>Castanea sativa</i>	Sweet Chestnut	R
<i>Dactylis glomerata</i>	Cock's-foot	R
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	R
<i>Galeopsis tetrahit</i>	Common Hemp-nettle	R
<i>Hedera helix</i>	Ivy	R
<i>Ligustrum ovalifolium</i>	Garden Privet	R
<i>Salix caprea</i>	Goat Willow	R
<i>Stellaria media</i>	Chickweed	R
<i>Urtica dioica</i>	Nettle	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN11	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Acer pseudoplatanus</i>	Sycamore	A
<i>Holcus mollis</i>	Creeping Soft-grass	A
<i>Quercus robur</i>	English Oak	A
<i>Betula pendula</i>	Silver Birch	F
<i>Holcus lanatus</i>	Yorkshire-fog	F
<i>Agrostis capillaris</i>	Common Bent	O
<i>Chamerion angustifolium</i>	Rosebay Willowherb	O
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Castanea sativa</i>	Sweet Chestnut	R
<i>Crocsmia x crocosmiiflora</i>	Montbretia	R

<i>Dactylis glomerata</i>	Cock's-foot	R	
<i>Dryopteris dilatata</i>	Broad Buckler-fern	R	
<i>Festuca rubra</i>	Red Fescue	R	
<i>Fraxinus excelsior</i>	Ash	R	
<i>Hedera helix</i>	Ivy	R	
<i>Hieracium</i> sp.	Hawkweed species	R	
<i>Hyacinthoides x massartiana</i>	Hybrid Bluebell	R	
<i>Ilex aquifolium</i>	Holly	R	
<i>Lamium galeobdolon argentatum</i>	Variegated Archangel	R	
<i>Mercurialis perennis</i>	Dog's Mercury	R	
<i>Rhododendron ponticum</i>	Rhododendron	R	
<i>Rubus idaeus</i>	Raspberry	R	
<i>Rumex obtusifolius</i>	Broad-leaved Dock	R	
<i>Senecio jacobaea</i>	Ragwort	R	
<i>Ulmus glabra</i>	Wych Elm	R	

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN12	
Habitat:	Broadleaved plantation	
Species List:		
Scientific Name	Common Name	Frequency
<i>Fagus sylvatica</i>	Beech	D
<i>Castanea sativa</i>	Sweet Chestnut	O
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	O
<i>Rhododendron ponticum</i>	Rhododendron	O
<i>Sambucus nigra</i>	Elder	O
<i>Agrostis capillaris</i>	Common Bent	R
<i>Alliaria petiolata</i>	Garlic Mustard	R
<i>Betula pendula</i>	Silver Birch	R
<i>Crataegus monogyna</i>	Hawthorn	R
<i>Elymus caninus</i>	Bearded Couch	R
<i>Hyacinthoides non-scripta</i>	Bluebell	R
<i>Plantago major</i>	Greater Plantain	R
<i>Pteridium aquilinum</i>	Bracken	R
<i>Ranunculus repens</i>	Creeping Buttercup	R
<i>Rubus fruticosus</i> agg.	Bramble	R
<i>Senecio jacobaea</i>	Ragwort	R
<i>Taraxacum</i> sp.	Dandelion species	R
<i>Urtica dioica</i>	Nettle	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN13	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Betula pendula</i>	Silver Birch	D
<i>Quercus robur</i>	English Oak	D
<i>Pteridium aquilinum</i>	Bracken	A
<i>Brachythecium rutabulum</i>	Moss species	F
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	F
<i>Rubus fruticosus</i> agg.	Bramble	F
<i>Betula pubescens</i>	Downy Birch	O
<i>Fagus sylvatica</i>	Beech	O
<i>Polytrichum</i> sp.	Moss species	O
<i>Agrostis capillaris</i>	Common Bent	R
<i>Castanea sativa</i>	Sweet Chestnut	R
<i>Chamerion angustifolium</i>	Rosebay Willowherb	R
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	R
<i>Hedera helix</i>	Ivy	R
<i>Juncus conglomeratus</i>	Compact Rush	R

<i>Juncus effusus</i>	Soft Rush	R
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN14	
Habitat:	Semi-natural broadleaved woodland, plantation	
Species List:		
Scientific Name	Common Name	Frequency
<i>Alnus incana</i>	Grey Alder	A
<i>Fraxinus excelsior</i>	Ash	A
<i>Acer pseudoplatanus</i>	Sycamore	F
<i>Betula pendula</i>	Silver Birch	F
<i>Brachythecium rutabulum</i>	Moss species	F
<i>Eurhynchium praelongum</i>	Moss species	F
<i>Quercus robur</i>	English Oak	F
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Alnus cordata</i>	Italian Alder	O
<i>Alnus glutinosa</i>	Alder	O
<i>Betula pubescens</i>	Downy Birch	O
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Urtica dioica</i>	Nettle	O
<i>Acer platanoides</i>	Norway Maple	R
<i>Cirsium arvense</i>	Creeping Thistle	R
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	R
<i>Digitalis purpurea</i>	Foxglove	R
<i>Epilobium montanum</i>	Broad-leaved Willowherb	R
<i>Epilobium sp.</i>	Willowherb species	R
<i>Picea abies</i>	Norway Spruce	R
<i>Potentilla reptans</i>	Creeping Cinquefoil	R
<i>Prunella vulgaris</i>	Selfheal	R
<i>Ranunculus repens</i>	Creeping Buttercup	R
<i>Rumex obtusifolius</i>	Broad-leaved Dock	R
<i>Senecio erucifolius</i>	Hoary Ragwort	R
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN15	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Quercus robur</i>	English Oak	D
<i>Betula pendula</i>	Silver Birch	A
<i>Pteridium aquilinum</i>	Bracken	A
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	F
<i>Dryopteris dilatata</i>	Broad Buckler-fern	O
<i>Eurhynchium praelongum</i>	Moss species	O
<i>Holcus mollis</i>	Creeping Soft-grass	O
<i>Mnium hornum</i>	Moss species	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Calluna vulgaris</i>	Heather	R
<i>Chamerion angustifolium</i>	Rosebay Willowherb	R
<i>Crataegus monogyna</i>	Hawthorn	R

<i>Fagus sylvatica</i>	Beech	R
<i>Geranium robertianum</i>	Herb-Robert	R
<i>Geum urbanum</i>	Wood Avens	R
<i>Lonicera periclymenum</i>	Honeysuckle	R
<i>Plagiothecium undulatum</i>	Moss species	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN16	
Habitat:	Semi-natural broadleaved woodland, on lane edge	
Species List:		
Scientific Name	Common Name	Frequency
<i>Quercus robur</i>	English Oak	A
<i>Acer pseudoplatanus</i>	Sycamore	F
<i>Chamerion angustifolium</i>	Rosebay Willowherb	F
<i>Fraxinus excelsior</i>	Ash	F
<i>Rubus fruticosus</i> agg.	Bramble	F
<i>Agrostis capillaris</i>	Common Bent	O
<i>Alliaria petiolata</i>	Garlic Mustard	O
<i>Arrhenatherum elatius</i>	False Oat-grass	O
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Dactylis glomerata</i>	Cock's-foot	O
<i>Festuca rubra</i>	Red Fescue	O
<i>Galium aparine</i>	Cleavers	O
<i>Geranium robertianum</i>	Herb-Robert	O
<i>Hedera helix</i>	Ivy	O
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Sambucus nigra</i>	Elder	O
<i>Taraxacum</i> sp.	Dandelion species	O
<i>Urtica dioica</i>	Nettle	O
<i>Arctium minus</i>	Lesser Burdock	R
<i>Artemisia vulgaris</i>	Mugwort	R
<i>Cirsium arvense</i>	Creeping Thistle	R
<i>Cirsium vulgare</i>	Spear Thistle	R
<i>Elymus caninus</i>	Bearded Couch	R
<i>Epilobium</i> sp.	Willowherb species	R
<i>Fallopia japonica</i>	Japanese Knotweed	R
<i>Galeopsis tetrahit</i>	Common Hemp-nettle	R
<i>Lamium album</i>	White Dead-nettle	R
<i>Lapsana communis</i>	Nipplewort	R
<i>Poa compressa</i>	Flattened Meadowgrass	R
<i>Polygonum aviculare</i>	Knotgrass	R
<i>Rumex obtusifolius</i>	Broad-leaved Dock	R
<i>Senecio jacobaea</i>	Ragwort	R
<i>Silene dioica</i>	Red Campion	R
<i>Sisymbrium officinale</i>	Hedge Mustard	R
<i>Solanum dulcamara</i>	Bittersweet	R
<i>Sonchus asper</i>	Prickly Sow-thistle	R
<i>Stellaria media</i>	Chickweed	R
<i>Teucrium scorodonium</i>	Woodsage	R

D = Dominant. A = Abundant. F = Frequent. O = Occasional. R = Rare

Target Note:	TN17	
Habitat:	Modified neutral grassland, scattered scrub	
Species List:		
Scientific Name	Common Name	Frequency

<i>Potentilla anserina</i>	Silverweed	A
<i>Holcus lanatus</i>	Yorkshire-fog	F
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Agrostis stolonifera</i>	Creeping Bent	O
<i>Alnus glutinosa</i>	Alder	O
<i>Arrhenatherum elatius</i>	False Oat-grass	O
<i>Betula pendula</i>	Silver Birch	O
<i>Brachythecium rutabulum</i>	Moss species	O
<i>Centaureum erythraea</i>	Common Centaury	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Festuca rubra</i>	Red Fescue	O
<i>Fraxinus excelsior</i>	Ash	O
<i>Juncus inflexus</i>	Hard Rush	O
<i>Lathyrus pratensis</i>	Meadow Vetchling	O
<i>Odontites verna</i>	Red Bartsia	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Prunella vulgaris</i>	Selfheal	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Acer pseudoplatanus</i>	Sycamore	R
<i>Alnus cordata</i>	Italian Alder	R
<i>Carex otrubae</i>	False Fox-sedge	R
<i>Cerastium fontanum</i>	Common Mouse-ear	R
<i>Dipsacus fullonum</i>	Teasel	R
<i>Epilobium parviflorum</i>	Hoary Willowherb	R
<i>Quercus robur</i>	English Oak	R
<i>Senecio jacobaea</i>	Ragwort	R
<i>Trifolium dubium</i>	Lesser Trefoil	R
<i>Trifolium repens</i>	White Clover	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN18	
Habitat:	Tall ruderal herb, scattered scrub	
Species List:		
Scientific Name	Common Name	Frequency
<i>Urtica dioica</i>	Nettle	A
<i>Betula pendula</i>	Silver Birch	F
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Salix cinerea</i>	Grey Willow	F
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Brachythecium rutabulum</i>	Moss species	O
<i>Chamerion angustifolium</i>	Rosebay Willowherb	O
<i>Dryopteris filix-mas</i>	Male-fern	O
<i>Epilobium sp.</i>	Willowherb species	O
<i>Eurhynchium praelongum</i>	Moss species	O
<i>Fraxinus excelsior</i>	Ash	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Quercus robur</i>	English Oak	O
<i>Ribes uva-crispa</i>	Gooseberry	O
<i>Salix caprea</i>	Goat Willow	O
<i>Sambucus nigra</i>	Elder	O
<i>Crataegus monogyna</i>	Hawthorn	R
<i>Dryopteris dilatata</i>	Broad Buckler-fern	R
<i>Ligustrum ovalifolium</i>	Garden Privet	R
<i>Malus domestica</i>	Apple	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN19	
Habitat:	Semi natural broadleaved woodland, modified neutral grassland	

Species List:		
Scientific Name	Common Name	Frequency
<i>Epilobium hirsutum</i>	Great Willowherb	F
<i>Fraxinus excelsior</i>	Ash	F
<i>Alnus cordata</i>	Italian Alder	O
<i>Alnus glutinosa</i>	Alder	O
<i>Alnus incana</i>	Grey Alder	O
<i>Arrhenatherum elatius</i>	False Oat-grass	O
<i>Centaurea nigra</i>	Knapweed	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Dipsacus fullonum</i>	Teasel	O
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	O
<i>Odontites verna</i>	Red Bartsia	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Potentilla reptans</i>	Creeping Cinquefoil	O
<i>Pseudoscleropodium purum</i>	Moss species	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rubus fruticosus</i> agg.	Bramble	O
<i>Salix cinerea</i>	Grey Willow	O
<i>Trifolium repens</i>	White Clover	O
<i>Achillea millefolium</i>	Yarrow	R
<i>Agrostis stolonifera</i>	Creeping Bent	R
<i>Calystegia silvatica</i>	Large Bindweed	R
<i>Carex otrubae</i>	False Fox-sedge	R
<i>Crataegus monogyna</i>	Hawthorn	R
<i>Cytisus scoparius</i>	Broom	R
<i>Epilobium</i> sp.	Willowherb species	R
<i>Ligustrum ovalifolium</i>	Garden Privet	R
<i>Medicago lupulina</i>	Black Medick	R
<i>Rosa rubiginosa</i>	Sweet Briar	R
<i>Rumex obtusifolius</i>	Broad-leaved Dock	R
<i>Senecio erucifolius</i>	Hoary Ragwort	R
<i>Vicia sativa</i>	Common Vetch	R
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN20	
Habitat:	Tall ruderal herb, scattered scrub	
Species List:		
Scientific Name	Common Name	Frequency
<i>Cirsium arvense</i>	Creeping Thistle	A
<i>Epilobium hirsutum</i>	Great Willowherb	A
<i>Alnus glutinosa</i>	Alder	F
<i>Arrhenatherum elatius</i>	False Oat-grass	F
<i>Rubus fruticosus</i> agg.	Bramble	F
<i>Alnus cordata</i>	Italian Alder	O
<i>Epilobium parviflorum</i>	Hoary Willowherb	O
<i>Epilobium</i> sp.	Willowherb species	O
<i>Festuca rubra</i>	Red Fescue	O
<i>Fraxinus excelsior</i>	Ash	O
<i>Galium aparine</i>	Cleavers	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Prunus spinosa</i>	Blackthorn	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rosa rubiginosa</i>	Sweet Briar	O
<i>Senecio jacobaea</i>	Ragwort	O
<i>Tussilago farfara</i>	Colt's-foot	O
<i>Urtica dioica</i>	Nettle	O

<i>Alnus incana</i>	Grey Alder	R
<i>Artemisia vulgaris</i>	Mugwort	R
<i>Carex otrubae</i>	False Fox-sedge	R
<i>Crataegus monogyna</i>	Hawthorn	R
<i>Cytisus scoparius</i>	Broom	R
<i>Dipsacus fullonum</i>	Teasel	R
<i>Heracleum sphondylium</i>	Hogweed	R
<i>Leucanthemum vulgare</i>	Oxeye daisy	R
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	R
<i>Medicago lupulina</i>	Black Medick	R
<i>Odontites verna</i>	Red Bartsia	R
<i>Rosa canina</i> agg.	Dog Rose	R
<i>Rumex obtusifolius</i>	Broad-leaved Dock	R
<i>Trifolium repens</i>	White Clover	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Management Issues:

The character of the extensive plantations of mature beech indicates quite intense historic management. However, neither the plantations nor the semi-natural woodlands appear to have undergone significant management input for many decades, either for reasons of improving the forestry crop or enhancing ecological diversity. The main area exhibiting current management is the ride created below the power-lines that cross the site, where trees have been cleared for safety reasons (TN1).

Considering that these woodlands occupy land that is classified as ancient woodland, the groundflora is generally impoverished. There is a small suite of characteristic woodland groundflora species which does survive (four ancient woodland indicator species were identified, predominantly to the south of the site at TN3 and TN4, although bluebells were also noted further north). The areas with highest potential for improvement of ecological diversity are the beech plantations.

Diversity:

A total of 140 species of vascular plants was recorded from this large area during the course of the 2010 fieldwork. Whilst the majority of them are grasses, herbs and trees that are locally native, a large proportion of trees are not native to this part of Yorkshire, for example: beech, sycamore (*Acer pseudoplatanus*), sweet chestnut (*Castanea sativa*) and grey alder (*Alnus incana*).

Whilst a large total of species has been recorded, this site covers very large area and much of it is rather lacking in diversity compared with most other ancient woodland sites. As well as lacking in species-diversity, the various woodlands and plantation areas lack structural diversity from stand to stand, generally being quite uniform in age and also height over most of the site. This is partly because of the fairly uniform topography and the underlying acidic bedrock throughout.

Naturalness:

The oak-birch woodlands form the vegetation community that would naturally be expected over the local ground conditions.

Large plantations of beech create the major unnatural elements within this area, which otherwise appears to have been left to grow and develop naturally with minimum management intervention.

Rare or Exceptional Features:

The large extent of semi-natural woodland on this site appears to be its major feature of interest. At the northern end, there is evidence of past quarrying with some rocky hollows and other exposures of the local grit-stone.

Fragility:

The fishing ponds (TN5) form the only standing water within the site. There is no system of watercourses through this area that could carry contaminants from outside the site. The woodland and plantation cover is robust and the former is actively spreading into the very few spaces on site that remain available for such spread.

Typicalness:

This large site is covered in woodland vegetation that is typical of the coalfield geology and landscape of much of the Barnsley area.

Recorded History & Cultural Associations:

Records of previous management of this ancient woodland site may well exist and should ideally be used to inform future management of the woodlands. There appear to be no ancient buildings, or other artefacts relating to the woodland, extant on site.

Connectivity within the Landscape:

The land immediately around the site remains in agricultural use and a network of hedgerows provides good linkage. The well-wooded disused railway along the northern boundary also provide links directly from the site into the wider countryside. The River Dove flows west/east to the north of the disused railway, further strengthening this connectivity, although no watercourses actually impinge on the site or its boundaries. On the western side there has been some open-cast coal mining and restoration has included large areas of plantation what will eventually merge with the existing woodland cover. Another railway line travels north-south offsite to the east of the site.

Value for appreciation of Nature and Learning:

The woodlands are easily accessed via a minor road that meanders along the northeast site boundary. There is also access on the west side, leading into a recently constructed car park. There is a railway station just beyond the east extremity of the site, so there is good access to the site by train also.

Local public footpath connections are very sparse, with only two coming in from the west and none from the east. However, there is a good network of informal paths throughout the woodland and the range of access possibilities makes this a good site to bring groups for appreciation of wildlife and natural processes.

There is no interpretation on site but it is most suitable for outdoor learning use and very accessible from schools within the three surrounding residential areas.

Recommendations:

The greater proportion of Wombwell Wood is recognised as ancient woodland on the Natural England Ancient Woodland Inventory, although only four of South Yorkshire's ancient woodland indicator species were seen during the survey. This maybe due to the season, however the woodland structure does little to promote the spread or colonisation by ground-flora.

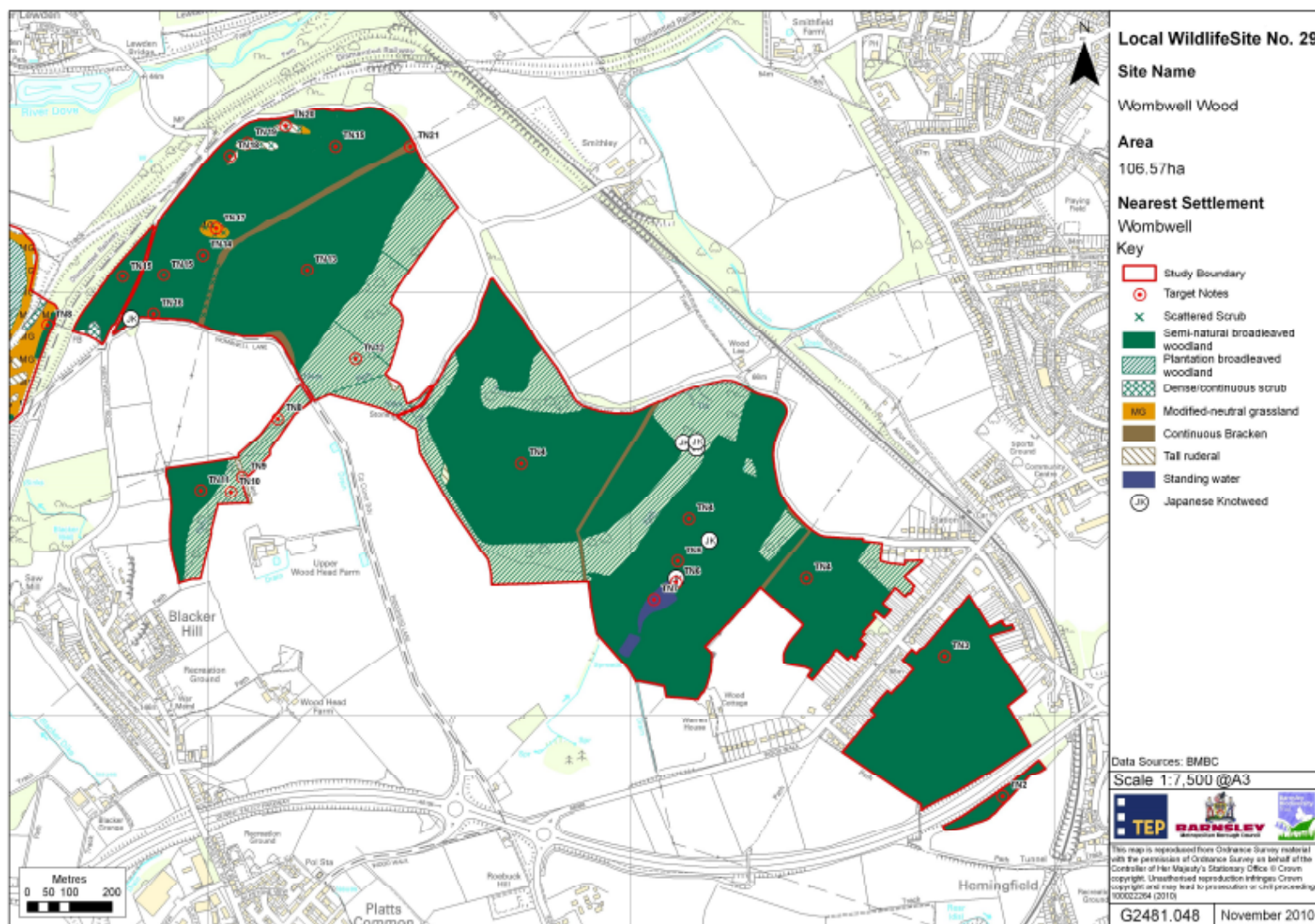
An increase in management is needed to enhance the biodiversity value of the site.

This aside the site's size, community function and location mean that Wombwell Woods should be retained with the Local Wildlife Sites register and effort made to increase its wildlife value.

Action:

Retain as a Local Wildlife Site

Work with landowners/managers to manage the woodlands to increase biodiversity and woodland structural diversity.





55. Parkhill Nature Reserve

LWS Assessment and Phase 1 Survey

Prepared by
TEP

for

Barnsley Metropolitan Borough Council

January 2011
(Edited December 2011)

Genesis Centre
Birchwood Science Park
Warrington
WA3 7BH

T: 01925 844004
F: 01925 844002
E: tep@tep.uk.com
W: www.tep.uk.com



Site Name:	Parkhill Nature Reserve
Site Area:	9.8ha
Survey Date:	September 2010
Nearest Settlement:	Wombwell
Grid Reference at Centre:	SE40658, 03153
Surveyor(s)	PG

Site Description:

This is a former brickworks on the eastern edge of the residential area of Wombwell. Parts of the kiln still remain to the north of a flooded clay pit (TN4), towards the south of the site (TN6). Since closure of the brickworks there has been little management intervention. This has allowed the grass/herb and wetland habitats initially developing over the site to gradually become colonised by dense natural regeneration of scrub/woodland habitat. Much of the western side of the site (TN1, TN5, TN7, TN20 and TN21) is now dominated by tall and dense willow-dominated scrub/woodland, often with abundant hawthorn (*Crataegus monogyna*). There is also some mixed broadleaved plantation between TN1 and TN19 areas.

Some areas of unmanaged neutral grasslands still survive within the expanding woodlands (TN6, TN8, TN19), but scrub development is evident, particularly in TN19 area. Surviving parts of these neutral swards indicate that they may once have been diverse and rich in herb species. Broad areas of open, but still unmanaged, grassland are found in the northeast of the site (TN11, TN12, TN15) where scrub development is still scant. However, these northeast swards tend to be dense, very grassy and fairly uniform.

The northern boundary is marked by Bulling Dike. This watercourse has no noteworthy wetland vegetation but dense neutral grassland overhanging the southern banks. In the southern half of the site there is a large waterbody and fringing swamp habitat (TN4), presumably developed from a former clay pit. Areas of swampy vegetation survive in this area (TN16, TN18), located to the north of the former kilns (TN6), with much reed present.

A well-vegetated ditch system impinges into the broad grassland swathe across the north and northeast part of the site (TN9, TN14). There is also a well-established pond with fringing reedbed (TN10) and a newer-looking pond, or scrape (TN13), with a rich collection of wetland plants. Around pond TN13 there is a population of the invasive alien plant, New Zealand pygmyweed (*Crassula helmsii*). Near the centre of the site there is an extensive area of tall ruderal herb development (TN17), dominated by nettle (*Urtica dioica*) and rosebay willowherb (*Chamerion angustifolium*).

Important Species:

This site contains New Zealand pygmyweed, Japanese knotweed (*Fallopia japonica*) - both are invasive alien plant species.

UKBAP Priority species water vole (*Arvicola terrestris*) and grass snake (*Natrix natrix*) has been recorded on this site within the last five years.

UKBAP breeding bird species recorded are reed bunting (*Emberiza schoeniclus*), grasshopper warbler (*Locustella naevia*), willow tit (*Poecile montanus*), dunnoek (*Prunella modularis*) and song thrush (*Turdus philomelos*).

Target Note:	TN1	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Crataegus monogyna</i>	Hawthorn	A
<i>Urtica dioica</i>	Nettle	A
<i>Alnus glutinosa</i>	Alder	F
<i>Betula pendula</i>	Silver Birch	F
<i>Dactylis glomerata</i>	Cock's-foot	F
<i>Rubus fruticosus</i> agg.	Bramble	F
<i>Acer campestre</i>	Field Maple	O
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Agrostis capillaris</i>	Common Bent	O
<i>Anthriscus sylvestris</i>	Cow Parsley	O
<i>Artemisia vulgaris</i>	Mugwort	O
<i>Brachythecium rutabulum</i>	Moss species	O
<i>Calystegia silvatica</i>	Large Bindweed	O
<i>Chamerion angustifolium</i>	Rosebay Willowherb	O
<i>Corylus avellana</i>	Hazel	O
<i>Epilobium</i> sp.	Willowherb species	O
<i>Festuca rubra</i>	Red Fescue	O
<i>Fraxinus excelsior</i>	Ash	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Medicago lupulina</i>	Black Medick	O
<i>Potentilla reptans</i>	Creeping Cinquefoil	O
<i>Prunus spinosa</i>	Blackthorn	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rubus idaeus</i>	Raspberry	O
<i>Salix caprea</i>	Goat Willow	O
<i>Salix cinerea</i>	Grey Willow	O
<i>Sambucus nigra</i>	Elder	O
<i>Symphytum x uplandicum</i>	Russian Comfrey	O
<i>Taraxacum officinale</i> agg.	Dandelion	O
<i>Trifolium repens</i>	White Clover	O
<i>Vicia sepium</i>	Bush Vetch	O
<i>Achillea millefolium</i>	Yarrow	R
<i>Anthyllis vulneraria</i>	Kidney Vetch	R
<i>Arctium minus</i>	Lesser Burdock	R
<i>Armoracia rusticana</i>	Horse-radish	R
<i>Brachypodium sylvaticum</i>	False Brome	R
<i>Carex hirta</i>	Hairy Sedge	R
<i>Cerastium fontanum</i>	Common Mouse-ear	R
<i>Crepis capillaris</i>	Smooth Hawk's-beard	R
<i>Daucus carota</i>	Wild Carrot	R
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	R
<i>Dryopteris filix-mas</i>	Male-fern	R
<i>Fallopia japonica</i>	Japanese Knotweed	R
<i>Hieracium</i> sp.	Hawkweed species	R
<i>Lapsana communis</i>	Nipplewort	R
<i>Lathyrus latifolius</i>	Broad-leaved Everlasting-pea	R
<i>Lathyrus pratensis</i>	Meadow Vetchling	R
<i>Leucanthemum vulgare</i>	Oxeye daisy	R
<i>Linaria vulgaris</i>	Common Toadflax	R
<i>Odontites verna</i>	Red Bartsia	R
<i>Prunus avium</i>	Wild Cherry	R
<i>Quercus robur</i>	English Oak	R
<i>Senecio jacobaea</i>	Ragwort	R
<i>Tragopogon pratensis</i>	Goat's-beard	R
<i>Trifolium pratense</i>	Red Clover	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN2	
Habitat:	Standing water (small shaded pond)	
Species List:		
Scientific Name	Common Name	Frequency
<i>Urtica dioica</i>	Nettle	F
<i>Rubus fruticosus</i> agg.	Bramble	O
<i>Sparganium erectum</i>	Branched Bur-reed	O
<i>Tussilago farfara</i>	Colt's-foot	O
Carex remota	Remote Sedge	R
<i>Dryopteris filix-mas</i>	Male-fern	R
<i>Juncus effusus</i>	Soft Rush	R
<i>Juncus inflexus</i>	Hard Rush	R
<i>Scrophularia nodosa</i>	Common Figwort	R
<i>Solanum dulcamara</i>	Bittersweet	R
<i>Typha latifolia</i>	Greater Reedmace	R
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN3	
Habitat:	Standing water & swamp along partially shaded ditch-line	
Species List:		
Scientific Name	Common Name	Frequency
<i>Epilobium hirsutum</i>	Great Willowherb	A
<i>Typha latifolia</i>	Greater Reedmace	F
<i>Urtica dioica</i>	Nettle	F
<i>Chamerion angustifolium</i>	Rosebay Willowherb	O
<i>Juncus effusus</i>	Soft Rush	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rubus fruticosus</i> agg.	Bramble	O
<i>Callitriche</i> sp.	Water Starwort species	R
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	R
<i>Fallopia japonica</i>	Japanese Knotweed	R
<i>Lycopus europaeus</i>	Gypsywort	R
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN4	
Habitat:	Standing water with fringing swamp, flooded clay pit	
Species List:		
Scientific Name	Common Name	Frequency
<i>Epilobium hirsutum</i>	Great Willowherb	A
<i>Typha latifolia</i>	Greater Reedmace	F
<i>Urtica dioica</i>	Nettle	F

<i>Calystegia silvatica</i>	Large Bindweed	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	O
<i>Equisetum arvense</i>	Field Horsetail	O
<i>Juncus effusus</i>	Soft Rush	O
<i>Lemna minor</i>	Common Duckweed	O
<i>Rubus fruticosus</i> agg.	Bramble	O
<i>Salix cinerea</i>	Grey Willow	O
<i>Salix fragilis</i>	Crack Willow	O
<i>Solidago canadensis</i>	Canadian Goldenrod	O
<i>Tussilago farfara</i>	Colt's-foot	O
<i>Crataegus monogyna</i>	Hawthorn	R
<i>Juncus inflexus</i>	Hard Rush	R
<i>Lemna trisulca</i>	Ivy-leaved Duckweed	R
<i>Lycopus europaeus</i>	Gypsywort	R
<i>Nuphar lutea</i>	Yellow Water-lily	R
<i>Nymphaea alba</i>	White Water-lily	R
<i>Ranunculus sceleratus</i>	Celery-leaved Buttercup	R
<i>Sparganium erectum</i>	Branched Bur-reed	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN5	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Arrhenatherum elatius</i>	False Oat-grass	F
<i>Betula pendula</i>	Silver Birch	F
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	F
<i>Epilobium hirsutum</i>	Great Willowherb	F
<i>Juncus conglomeratus</i>	Compact Rush	F
<i>Juncus effusus</i>	Soft Rush	F
<i>Rubus fruticosus</i> agg.	Bramble	F
<i>Salix caprea</i>	Goat Willow	F
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Juncus inflexus</i>	Hard Rush	O
<i>Phalaris arundinacea</i>	Reed Canary-grass	O
<i>Populus nigra</i>	Black Poplar agg.	O
<i>Salix cinerea</i>	Grey Willow	O
<i>Senecio erucifolius</i>	Hoary Ragwort	O
<i>Tussilago farfara</i>	Colt's-foot	O
<i>Typha latifolia</i>	Greater Reedmace	O
<i>Urtica dioica</i>	Nettle	O
<i>Chamerion angustifolium</i>	Rosebay Willowherb	R
<i>Crataegus monogyna</i>	Hawthorn	R
<i>Lathyrus pratensis</i>	Meadow Vetchling	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN6	
Habitat:	Modified neutral grassland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Festuca rubra</i>	Red Fescue	A
<i>Arrhenatherum elatius</i>	False Oat-grass	F
<i>Betula pendula</i>	Silver Birch	F
<i>Dactylis glomerata</i>	Cock's-foot	F
<i>Holcus lanatus</i>	Yorkshire-fog	F
<i>Trifolium repens</i>	White Clover	F
<i>Tussilago farfara</i>	Colt's-foot	F

<i>Artemisia vulgaris</i>	Mugwort	O
<i>Cerastium fontanum</i>	Common Mouse-ear	O
<i>Chamerion angustifolium</i>	Rosebay Willowherb	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	O
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Leontodon autumnalis</i>	Autumn Hawkbit	O
<i>Lolium perenne</i>	Ryegrass	O
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	O
<i>Medicago lupulina</i>	Black Medick	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Rubus fruticosus</i> agg.	Bramble	O
<i>Senecio jacobaea</i>	Ragwort	O
<i>Symphytum x uplandicum</i>	Russian Comfrey	O
<i>Trifolium pratense</i>	Red Clover	O
<i>Urtica dioica</i>	Nettle	O
<i>Vicia hirsuta</i>	Hairy Tare	O
<i>Achillea millefolium</i>	Yarrow	R
<i>Corylus avellana</i>	Hazel	R
<i>Dryopteris filix-mas</i>	Male-fern	R
<i>Festuca arundinacea</i>	Tall Fescue	R
<i>Fraxinus excelsior</i>	Ash	R
<i>Sonchus oleraceus</i>	Smooth Sow-thistle	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN7	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Crataegus monogyna</i>	Hawthorn	A
<i>Rubus fruticosus</i> agg.	Bramble	A
<i>Salix caprea</i>	Goat Willow	A
<i>Urtica dioica</i>	Nettle	A
<i>Brachythecium rutabulum</i>	Moss species	F
<i>Salix fragilis</i>	Crack Willow	F
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Betula pendula</i>	Silver Birch	O
<i>Calystegia silvatica</i>	Large Bindweed	O
<i>Chamerion angustifolium</i>	Rosebay Willowherb	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Dactylis glomerata</i>	Cock's-foot	O
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	O
<i>Dryopteris dilatata</i>	Broad Buckler-fern	O
<i>Elytrigia repens</i>	Common Couch	O
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Epilobium</i> sp.	Willowherb species	O
<i>Equisetum arvense</i>	Field Horsetail	O
<i>Fraxinus excelsior</i>	Ash	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Poa annua</i>	Annual Meadow-grass	O
<i>Quercus robur</i>	English Oak	O
<i>Rosa canina</i> agg.	Dog Rose	O
<i>Rubus idaeus</i>	Raspberry	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Salix cinerea</i>	Grey Willow	O
<i>Sambucus nigra</i>	Elder	O
<i>Solanum dulcamara</i>	Bittersweet	O
<i>Stachys sylvatica</i>	Hedge Woundwort	O
<i>Agrostis stolonifera</i>	Creeping Bent	R
<i>Alliaria petiolata</i>	Garlic Mustard	R
<i>Artemisia vulgaris</i>	Mugwort	R

<i>Corylus avellana</i>	Hazel	R
<i>Dipsacus fullonum</i>	Teasel	R
<i>Dryopteris filix-mas</i>	Male-fern	R
<i>Geranium robertianum</i>	Herb-Robert	R
<i>Ligustrum ovalifolium</i>	Garden Privet	R
<i>Plantago lanceolata</i>	Ribwort Plantain	R
<i>Polystichum aculeatum</i>	Hard Shield-fern	R
<i>Taraxacum officinale</i> agg.	Dandelion	R
<i>Vicia cracca</i>	Tufted Vetch	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN8	
Habitat:	Modified neutral grassland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Arrhenatherum elatius</i>	False Oat-grass	D
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	F
<i>Rubus fruticosus</i> agg.	Bramble	F
<i>Betula pendula</i>	Silver Birch	O
<i>Carex hirta</i>	Hairy Sedge	O
<i>Chamerion angustifolium</i>	Rosebay Willowherb	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Equisetum arvense</i>	Field Horsetail	O
<i>Festuca rubra</i>	Red Fescue	O
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Salix cinerea</i>	Grey Willow	O
<i>Urtica dioica</i>	Nettle	O
<i>Conium maculatum</i>	Hemlock	R
<i>Galium aparine</i>	Cleavers	R
<i>Heracleum sphondylium</i>	Hogweed	R
<i>Hieracium</i> sp.	Hawkweed species	R
<i>Lathyrus pratensis</i>	Meadow Vetchling	R
<i>Linaria vulgaris</i>	Common Toadflax	R
<i>Rumex acetosa</i>	Common Sorrel	R
<i>Sanguisorba officinalis</i>	Great Burnet	R
<i>Stellaria graminea</i>	Lesser Stitchwort	R
<i>Typha latifolia</i>	Greater Reedmace	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN9	
Habitat:	Ditch with swamp	
Species List:		
Scientific Name	Common Name	Frequency
<i>Apium nodiflorum</i>	Fool's Watercress	A
<i>Glyceria fluitans</i>	Floating Sweet-grass	A
<i>Arrhenatherum elatius</i>	False Oat-grass	F
<i>Salix cinerea</i>	Grey Willow	F
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Juncus effusus</i>	Soft Rush	O
<i>Lemna minor</i>	Common Duckweed	O
<i>Phalaris arundinacea</i>	Reed Canary-grass	O
<i>Rubus fruticosus</i> agg.	Bramble	O
<i>Typha latifolia</i>	Greater Reedmace	O
<i>Urtica dioica</i>	Nettle	O
<i>Callitriche</i> sp.	Water Starwort species	R

<i>Galega officinalis</i>	Goat's-rue	R
<i>Lythrum salicaria</i>	Purple Loosestrife	R
<i>Scrophularia auriculata</i>	Water Betony	R
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		
Target Note:	TN11	
Habitat:	Modified neutral grassland	
Species List:		
This unmanaged neutral grassland is generally species-poor and very similar to the TN12 sward to the east.		
No species list compiled for this area		

Target Note:	TN12	
Habitat:	Modified neutral grassland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Arrhenatherum elatius</i>	False Oat-grass	D
<i>Agrostis capillaris</i>	Common Bent	O
<i>Cerastium fontanum</i>	Common Mouse-ear	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Dactylis glomerata</i>	Cock's-foot	O
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	O
<i>Equisetum arvense</i>	Field Horsetail	O
<i>Festuca rubra</i>	Red Fescue	O
<i>Hypochaeris radicata</i>	Common Cat's-ear	O
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Trifolium pratense</i>	Red Clover	O
<i>Trifolium repens</i>	White Clover	O
<i>Achillea millefolium</i>	Yarrow	R
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	R
<i>Betula pendula</i>	Silver Birch	R
<i>Centaurea nigra</i>	Knapweed	R
<i>Cichorium intybus</i>	Chicory	R
<i>Cirsium palustre</i>	Marsh Thistle	R
<i>Cynosurus cristatus</i>	Crested Dog's-tail	R
<i>Hieracium sp.</i>	Hawkweed species	R
<i>Lactuca serriola</i>	Prickly Lettuce	R
<i>Leontodon autumnalis</i>	Autumn Hawkbit	R
<i>Odontites verna</i>	Red Bartsia	R
<i>Plantago lanceolata</i>	Ribwort Plantain	R
<i>Sanguisorba officinalis</i>	Great Burnet	R
<i>Senecio jacobaea</i>	Ragwort	R
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN13	
Habitat:	Swamp, standing water, marshy grassland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Phragmites australis</i>	Reed	D
<i>Crassula helmsii</i>	New Zealand Pygmyweed	F
<i>Alnus glutinosa</i>	Alder	O
<i>Betula pendula</i>	Silver Birch	O
<i>Carex flacca</i>	Glaucous Sedge	O
<i>Eleocharis palustris</i>	Common Spike-rush	O
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Lythrum salicaria</i>	Purple Loosestrife	O
<i>Mentha aquatica</i>	Water Mint	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Salix cinerea</i>	Common Sallow	O
<i>Achillea ptarmica</i>	Sneezewort	R
<i>Alisma plantago-aquaticum</i>	Water-plantain	R
<i>Centaurea erythraea</i>	Common Centaury	R
<i>Iris pseudacorus</i>	Yellow Flag Iris	R
<i>Juncus articulatus</i>	Jointed Rush	R
<i>Juncus conglomeratus</i>	Compact Rush	R
<i>Juncus effusus</i>	Soft Rush	R
<i>Lychnis flos-cuculi</i>	Ragged Robin	R
<i>Pulicaria dysenterica</i>	Fleabane	R
<i>Ranunculus flammula</i>	Lesser Spearwort	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN14	
Habitat:	Swamp along broad ditch with standing water	
Species List:		
Scientific Name	Common Name	Frequency
<i>Lemna minor</i>	Common Duckweed	A
<i>Typha latifolia</i>	Greater Reedmace	A
<i>Apium nodiflorum</i>	Fool's Watercress	F
<i>Sparganium erectum</i>	Branched Bur-reed	F
<i>Alisma plantago-aquaticum</i>	Water-plantain	O
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Juncus conglomeratus</i>	Compact Rush	O
<i>Carex otrubae</i>	False Fox-sedge	R
<i>Cirsium palustre</i>	Marsh Thistle	R
<i>Lycopus europaeus</i>	Gypsywort	R
<i>Lythrum salicaria</i>	Purple Loosestrife	R
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN15	
Habitat:	Modified neutral grassland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Arrhenatherum elatius</i>	False Oat-grass	D
<i>Agrostis capillaris</i>	Common Bent	F
<i>Achillea millefolium</i>	Yarrow	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Dactylis glomerata</i>	Cock's-foot	O
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	O
<i>Equisetum arvense</i>	Field Horsetail	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Lolium perenne</i>	Ryegrass	O
<i>Rubus fruticosus</i> agg.	Bramble	O

<i>Rumex acetosa</i>	Common Sorrel	O
<i>Trifolium pratense</i>	Red Clover	O
<i>Trifolium repens</i>	White Clover	O
<i>Carex hirta</i>	Hairy Sedge	R
<i>Chamerion angustifolium</i>	Rosebay Willowherb	R
<i>Cirsium palustre</i>	Marsh Thistle	R
<i>Crataegus monogyna</i>	Hawthorn	R
<i>Festuca rubra</i>	Red Fescue	R
<i>Galeopsis tetrahit</i>	Common Hemp-nettle	R
<i>Hieracium</i> sp.	Hawkweed species	R
<i>Holcus lanatus</i>	Yorkshire-fog	R
<i>Juncus effusus</i>	Soft Rush	R
<i>Lathyrus pratensis</i>	Meadow Vetchling	R
<i>Leontodon autumnalis</i>	Autumn Hawkbit	R
<i>Odontites verna</i>	Red Bartsia	R
<i>Sambucus nigra</i>	Elder	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN16	
Habitat:	Swamp, reedmace-dominated	
Species List:		
Scientific Name	Common Name	Frequency
<i>Typha latifolia</i>	Greater Reedmace	D
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	O
<i>Juncus conglomeratus</i>	Compact Rush	O
<i>Juncus effusus</i>	Soft Rush	O
<i>Salix cinerea</i>	Common Sallow	O
<i>Urtica dioica</i>	Nettle	O
<i>Arrhenatherum elatius</i>	False Oat-grass	R
<i>Cirsium palustre</i>	Marsh Thistle	R
<i>Epilobium hirsutum</i>	Great Willowherb	R
<i>Galium palustre</i>	Marsh Bedstraw	R

D = Dominant. A = Abundant. F = Frequent. O = Occasional. R = Rare

Target Note:	TN17	
Habitat:	Tall ruderal herb	
Species List:		
Scientific Name	Common Name	Frequency
<i>Urtica dioica</i>	Nettle	D
<i>Chamerion angustifolium</i>	Rosebay Willowherb	D
<i>Rubus fruticosus</i> agg.	Bramble	F
<i>Rubus idaeus</i>	Raspberry	O
<i>Fallopia japonica</i>	Japanese Knotweed	R

D = Dominant. A = Abundant. F = Frequent. O = Occasional. R = Rare

Target Note:	TN18		
Habitat:	Swamp and tall ruderal mix		
Species List:			
<i>Phragmites australis</i>	Reed		D
<i>Chamerion angustifolium</i>	Rosebay Willowherb		A

Target Note:	TN19	
Habitat:	Modified neutral grassland with scrub	
Species List:		
Scientific Name	Common Name	Frequency
<i>Arrhenatherum elatius</i>	False Oat-grass	F
<i>Calystegia silvatica</i>	Large Bindweed	F
<i>Chamerion angustifolium</i>	Rosebay Willowherb	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Dactylis glomerata</i>	Cock's-foot	F
<i>Festuca rubra</i>	Red Fescue	F
<i>Rubus fruticosus</i> agg.	Bramble	F
<i>Solidago canadensis</i>	Canadian Goldenrod	F
<i>Urtica dioica</i>	Nettle	F
<i>Anthriscus sylvestris</i>	Cow Parsley	O
<i>Armoracia rusticana</i>	Horse-radish	O
<i>Artemisia vulgaris</i>	Mugwort	O
<i>Carex hirta</i>	Hairy Sedge	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Dipsacus fullonum</i>	Teasel	O
<i>Fraxinus excelsior</i>	Ash	O
<i>Hieracium</i> sp.	Hawkweed species	O
<i>Hypericum perforatum</i>	Perforate St John's-wort	O
<i>Linaria vulgaris</i>	Common Toadflax	O
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	O
<i>Potentilla reptans</i>	Creeping Cinquefoil	O
<i>Symphytum</i> x <i>uplandicum</i>	Russian Comfrey	O
<i>Trifolium repens</i>	White Clover	O
<i>Tussilago farfara</i>	Colt's-foot	O
<i>Vicia sepium</i>	Bush Vetch	O
<i>Arctium minus</i>	Lesser Burdock	R
<i>Conium maculatum</i>	Hemlock	R
<i>Crepis capillaris</i>	Smooth Hawk's-beard	R
<i>Lysimachia punctata</i>	Dotted Loosetrife	R
<i>Rosa canina</i> agg.	Dog Rose	R
<i>Sambucus nigra</i>	Elder	R
<i>Stachys palustris</i>	Marsh Woundwort	R
<i>Tragopogon pratensis</i>	Goat's-beard	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN20
Habitat:	Semi-natural broadleaved woodland
Species List:	
This is an area of natural regeneration dominated by goat willow (<i>Salix caprea</i>) and grey willow (<i>Salix cinerea</i>).	
No species list compiled for this area	

Target Note:	TN21	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Crataegus monogyna</i>	Hawthorn	A
<i>Urtica dioica</i>	Nettle	A
<i>Rubus fruticosus</i> agg.	Bramble	F
<i>Stachys sylvatica</i>	Hedge Woundwort	F
<i>Dactylis glomerata</i>	Cock's-foot	O
<i>Epilobium</i> sp.	Willowherb species	O
<i>Festuca rubra</i>	Red Fescue	O
<i>Fraxinus excelsior</i>	Ash	O
<i>Geranium robertianum</i>	Herb-Robert	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Plantago major</i>	Greater Plantain	O
<i>Potentilla reptans</i>	Creeping Cinquefoil	O
<i>Salix caprea</i>	Goat Willow	O
<i>Tussilago farfara</i>	Colt's-foot	O
<i>Acer campestre</i>	Field Maple	R
<i>Acer pseudoplatanus</i>	Sycamore	R
<i>Arctium minus</i>	Lesser Burdock	R
<i>Centaurea nigra</i>	Knapweed	R
<i>Corylus avellana</i>	Hazel	R
<i>Ligustrum vulgare</i>	Wild Privet	R
<i>Quercus robur</i>	English Oak	R
<i>Rubus idaeus</i>	Raspberry	R
<i>Vicia sepium</i>	Bush Vetch	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Management Issues:

As this site has been declared a LNR, and its diversity is based on initial non-intervention by humans, it now seems appropriate that some management should be carried out to maintain diversity. What seem to have once been quite rich grasslands in the western part of the site have greatly diminished due to spread of scrub/woodland. Most of the areas outside the established canopy already have much scrub colonisation. Spread of scrub and woodland can similarly affect swamp and wetland areas, if allowed to proceed unmanaged.

The north-western neutral grasslands appear to be relatively lacking in diversity and still remain much more open. There are some small stands of Japanese knotweed (*Fallopia japonica*) in the southern fringes of TN1 and New Zealand pygmyweed in TN13, as these are both invasive species some control is advised.

Local naturalists are concerned about illicit fishing in the main waterbody (TN4).

Diversity:

This is quite a rich site, being diverse both in terms of structure and numbers of species present. During the fieldwork in mid-September 2010, 150 species of plants were recorded, the majority of them native to this part of Yorkshire. Habitats range from quite large water bodies to naturally developing woodlands, reedbeds, reedmace swamps and neutral grasslands. A range of smaller features such as ponds, ditches and other watercourses are also represented. The variation in species present and the relative heights and densities of the various vegetation communities lends itself to providing suitable niches for a wide range of animal life, both vertebrate and invertebrate.

Naturalness:

This site has undergone intense modification by human activity, with establishment of the brick kilns and storage yards, as well as excavation of extensive clay pits. However, since abandonment of brick-making, the re-establishment of vegetation has largely been by processes of natural succession and a large number of locally native plant species has found niches here. If allowed to continue unmanaged this site would become a mix of dry and damp native woodland types with some open water and native swamp habitats.

Rare or Exceptional Features:

The large flooded clay pit is a valuable diverse habitat, especially so close to houses and schools. The developing woodlands may well increase in ecological value (and extent) over time.

Fragility:

Generally this site has quite robust vegetation communities, but there is always the potential for tipping of rubbish along the boundaries shared with the back gardens of houses, causing some peripheral deleterious effects.

The wetland areas could also suffer loss of diversity and diminution of naturalness due to spread of New Zealand pygmyweed from its current stronghold on TN13 area.

With its suite of open water-bodies, ditch-lines and wet swamps there is potential for water pollution incidents to cause problems for the ecological value of this site.

Typicalness:

Barnsley has a large suite of post-industrial sites and much of the woodland, grassland and swamp elements developed here are fairly typical for the area. The habitats that have developed here are much as would be expected for such a site in this location - its proximity to residential areas adds value by making it an easily accessible wild space.

Recorded History & Cultural Associations:

Before development of the present suite of vegetation communities, the main activity carried out here was brick-making. There is great scope for researching the full history of this activity on this site. Ideally the tall brick chimney and remaining kiln bank would remain to help interpret this aspect of the site.

Connectivity within the Landscape:

There is residential development all along the western edge of the site, with pedestrian links into the site. There is a large reclaimed tip, with similar grassland to that found on site, located immediately along the eastern side, varied by plantings of native shrubs and trees. A council depot and a large sewage works also abut the reclaimed tip to the east. Playing fields lie to the north of the site. There are the wooded banks of a disused railway in the south, with some industrial development beyond that.

The Trans-Pennine Trail forms the southern boundary to the site and is an important link.

Value for appreciation of Nature and Learning:

The pedestrian access from the houses in the west links into a good path system around the inner edges of the site. Paths are linked through the middle of the site and pass the remains of the brick works buildings. The site can be accessed from both a footpath route and a public bridleway along the railway line to the south.

The Broomhill Nature Reserve is accessible about 1.5km to the east and just 1km further east beyond that lies the large RSPB reserve at Old Moor, a LWS. There could be access to the site for school groups via Park Hill Road, in the south-western corner.

There are schools within 1km to both the south and north of this site. The internal paths are in good order and give access to all habitat types, including a waterside stretch by the old brick works. There is currently no interpretive material on site. The site's accessibility, diversity and proximity to population centres give it potential value for ecological education.

Recommendations:

The site is botanically diverse. It is located in proximity to the local community and the Trans-Pennine Trail and it is part of a wider network of wetland sites and Water voles have been recorded here. These factors combined confirm that this site qualifies as a Local Wildlife Site.

The adjacent land to the east should also be considered for surveying and potential for adoption as a LWS, as this site has some wildlife value and would connect Parkhill Nature Reserve with the Broomhill Flash and Wombwell Ings LWS.

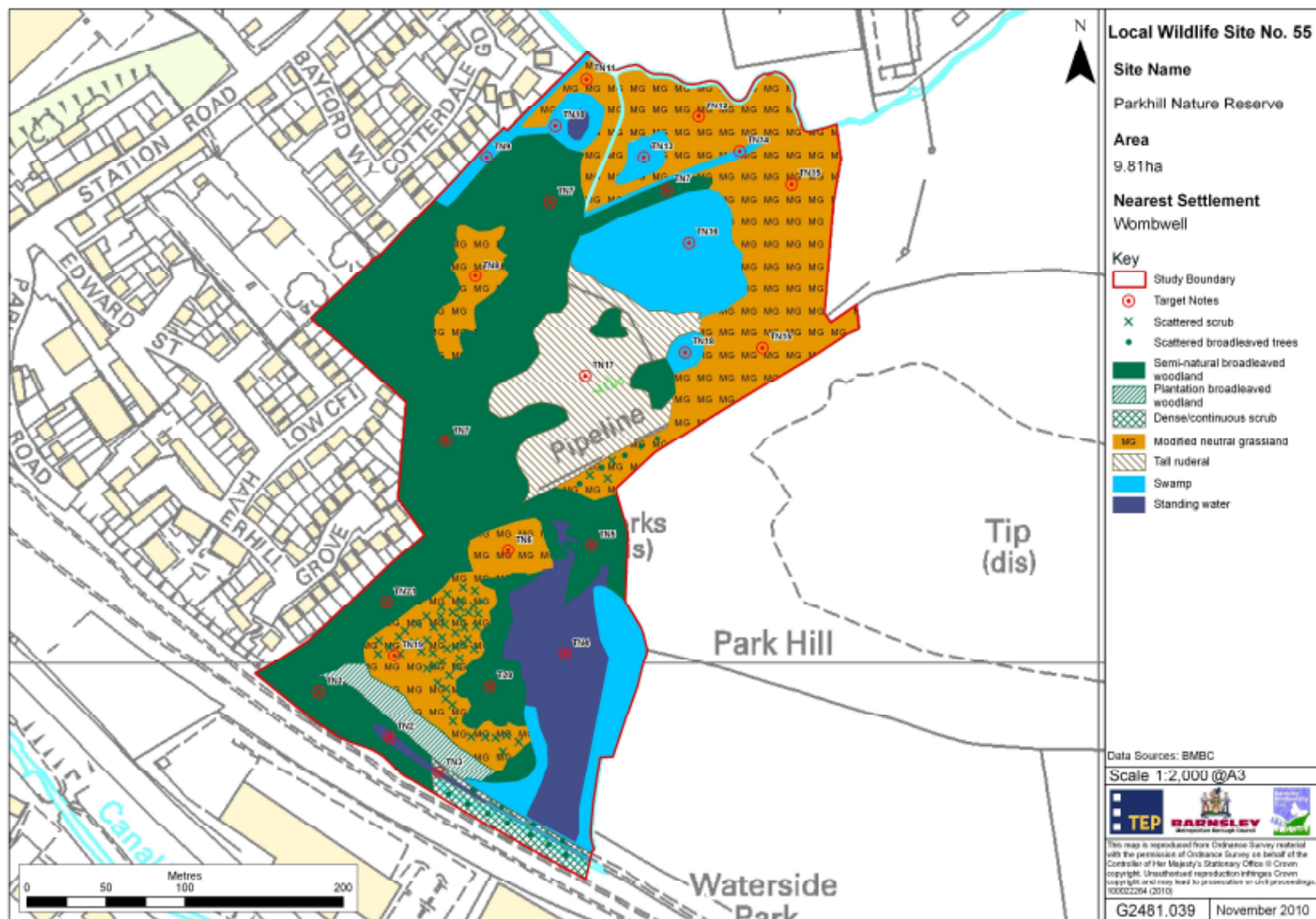
Action:

Adopt as a Local Wildlife Site

Survey adjacent land and consider for LWS adoption

Recommend that a management plan is drawn up and applied

Conduct a further survey to establish the distribution of water vole





57. Swaithe Flood Meadows

LWS Assessment and Phase 1 Survey

Prepared by
TEP

for

Barnsley Metropolitan Borough Council

January 2011
(Edited December 2011)

Genesis Centre
Birchwood Science Park
Warrington
WA3 7BH

T: 01925 844004
F: 01925 844002
E: tep@tep.uk.com
W: www.tep.uk.com



Site Name:	Swaithe Flood Meadows
Site Area:	14.92ha
Survey Date:	September 2010
Nearest Settlement:	Wombwell
Grid Reference at Centre:	SE38043, 04235
Surveyor(s)	LAC, VG

Site Description:

Swaithe Flood Meadows is currently an arable field which, at the time of the 2010 site visit, was predominantly bare ground with wheat stubble (TN2). The north and east (TN1) boundaries are marked by species-poor hedgerows. There is a section of a double hawthorn hedgerow separated by a dry ditch on the northern boundary (TN1) with evidence of past hedge-laying. A disused canal is adjacent to the north west boundary.

The River Dove flows along the southern site boundary (TN3) and large sections of its banks are dominated by Himalayan balsam (*Impatiens glandulifera*). There is an area of swamp/marsh with an area of standing water just west of the site adjacent, aerial imagery shows this habitat continues to the west and is likely to be a former course of the River Dove.

There are two slight hollows on the field which are likely to hold water in winter but at the time of the site visit were marshy grassland (TN5). The dominant species were amphibious bistort (*Persicaria amphibia*), fat hen (*Chenopodium album*), jointed rush (*Juncus articulatus*) and creeping bent (*Agrostis stolonifera*).

Important Species:

UKBAP breeding bird species include skylark (*Alauda arvensis*), reed bunting (*Emberiza schoeniclus*), grey partridge (*Perdix perdix*) and lapwing (*Vanellus vanellus*). Barn owl (*Tyto alba*) is recorded hunting this area and breed nearby.

Bluebells (*Hyacinthoides non-scripta*) are also present on the site.

Target Note:	TN1	
Habitat:	Species-poor double hedgerow on north boundary (with dry ditch)	
Species List:		
Scientific Name	Common Name	Frequency
<i>Crataegus monogyna</i>	Hawthorn	D
<i>Poa trivialis</i>	Rough Meadow-grass	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Rubus fruticosus</i> agg.	Bramble	O
<i>Aegopodium podagraria</i>	Ground-elder	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Stachys sylvatica</i>	Hedge Woundwort	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Impatiens glandulifera</i>	Himalayan Balsam	O
<i>Urtica dioica</i>	Nettle	O
<i>Sambucus nigra</i>	Elder	O
<i>Alliaria petiolata</i>	Garlic Mustard	O
<i>Arrhenatherum elatius</i>	False Oat-grass	O
<i>Epilobium hirsutum</i>	Great Willowherb	O

<i>Elymus caninus</i>	Bearded Couch	O
<i>Anisanthera sterilis</i>	Sterile Brome	O
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	R
<i>Lamiasrum galeobdolon</i>	Yellow Archangel	R
<i>Rosa canina</i> agg.	Dog Rose	R
<i>Salix fragilis</i>	Crack Willow	R
<i>Acer pseudoplatanus</i>	Sycamore	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN2		
Habitat:	Arable field		
Species List:			
Scientific Name	Common Name	Frequency	
<i>Arrhenatherum elatius</i>	False Oat-grass	F	
<i>Plantago major</i>	Greater Plantain	F	
<i>Equisetum arvense</i>	Field Horsetail	F	
<i>Epilobium hirsutum</i>	Great Willowherb	O	
<i>Cerastium fontanum</i>	Common Mouse-ear	O	
<i>Holcus lanatus</i>	Yorkshire-fog	O	
<i>Arctium minus</i>	Lesser Burdock	O	
<i>Anagallis arvensis</i>	Scarlet Pimpernel	O	
<i>Cirsium vulgare</i>	Spear Thistle	O	
<i>Persicaria maculosa</i>	Redshank	O	
<i>Anisanthera sterilis</i>	Sterile Brome	R	
<i>Dipsacus fullonum</i>	Teasel	R	
<i>Papaver rhoeas</i>	Common Poppy	R	
<i>Tripleurospermum inodorum</i>	Scentless Mayweed	R	
<i>Juncus bufonius</i>	Toad Rush	R	
<i>Stachys palustris</i>	Marsh Woundwort	R	
<i>Sonchus asper</i>	Prickly Sow-thistle	R	
<i>Epilobium ciliatum</i>	American Willowherb	R	
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare			

Target Note:	TN3	
Habitat:	Southern boundary forming the north bank of the River Dove	
Species List:		
Scientific Name	Common Name	Frequency
<i>Persicaria amphibia</i>	Amphibious Bistort	A
<i>Chenopodium album</i>	Fat-hen	A
<i>Agrostis stolonifera</i>	Creeping Bent	A
<i>Juncus articulatus</i>	Jointed Rush	A
<i>Epilobium hirsutum</i>	Great Willowherb	F
<i>Triticum aestivum</i>	Wheat	F
<i>Equisetum arvense</i>	Field Horsetail	F
<i>Juncus bufonius</i>	Toad Rush	F
<i>Alopecurus geniculatus</i>	Marsh Foxtail	F
<i>Epilobium montanum</i>	Broad-leaved Willowherb	O
<i>Chenopodium rubrum</i>	Red Goosefoot	O
<i>Polygonum aviculare</i>	Knotgrass	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Matricaria recutita</i>	Scented Mayweed	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Tussilago farfara</i>	Colt's-foot	O
<i>Plantago major</i>	Greater Plantain	O
<i>Poa trivialis</i>	Rough Meadow-grass	O
<i>Filago vulgaris</i>	Common Cudweed	O
<i>Galeopsis tetrahit</i>	Common Hemp-nettle	O
<i>Geranium dissectum</i>	Cut-leaved Cranesbill	R
<i>Sonchus asper</i>	Prickly Sow-thistle	R
<i>Vicia tetrasperma</i>	Smooth Tare	R

<i>Alisma plantago-aquaticum</i>	Water-plantain	R
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN4	
Habitat:	Species-poor single hedgerow and field margin on west boundary	
Species List:		
Scientific Name	Common Name	Frequency
Hedgerow is continuation of TN1. Field margin species as follows:		
<i>Triticum aestivum</i>	Wheat	D
<i>Equisetum arvense</i>	Field Horsetail	A
<i>Poa annua</i>	Annual Meadow-grass	F
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Agrostis stolonifera</i>	Creeping Bent	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Festuca rubra</i>	Red Fescue	O
<i>Plantago major</i>	Greater Plantain	O
<i>Dactylis glomerata</i>	Cock's-foot	O
<i>Poa trivialis</i>	Rough Meadow-grass	O
<i>Elytrigia repens</i>	Common Couch	O
<i>Arrhenatherum elatius</i>	False Oat-grass	O
<i>Epilobium montanum</i>	Broad-leaved Willowherb	O
<i>Cirsium vulgare</i>	Spear Thistle	O
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN5	
Habitat:	Marshy grassland depression within centre of field	
Species List:		
Scientific Name	Common Name	Frequency
<i>Equisetum arvense</i>	Field Horsetail	F
<i>Rubus fruticosus</i> agg.	Bramble	F
<i>Elytrigia repens</i>	Common Couch	F
<i>Acer pseudoplatanus</i>	Sycamore	F
<i>Arrhenatherum elatius</i>	False Oat-grass	F
<i>Alnus glutinosa</i>	Alder	F
<i>Urtica dioica</i>	Nettle	F
<i>Hedera helix</i>	Ivy	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Impatiens glandulifera</i>	Himalayan Balsam	F
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	O
<i>Holcus mollis</i>	Creeping Soft-grass	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Quercus petraea</i>	Sessile Oak	O
<i>Salix fragilis</i>	Crack Willow	O
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Hyacinthoides non-scripta</i>	Bluebell	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Sambucus nigra</i>	Elder	O
<i>Stachys sylvatica</i>	Hedge Woundwort	O
<i>Lapsana communis</i>	Nipplewort	O
<i>Fraxinus excelsior</i>	Ash	O
<i>Geum urbanum</i>	Wood Avens	R
<i>Linaria vulgaris</i>	Common Toadflax	R
<i>Centaurea nigra</i>	Knapweed	R
<i>Scrophularia auriculata</i>	Water Betony	R
<i>Lathyrus pratensis</i>	Meadow Vetchling	R
<i>Sparganium erectum</i>	Branched Bur-reed	R
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Management Issues:

The site is currently cultivated for wheat, and therefore is managed for this purpose. The wetter areas of the site appear to be left uncultivated.

The invasive species Himalayan balsam was found on site. Just off site, adjacent to the footpath in the west there is a stand of Japanese knotweed (*Fallopia japonica*). It did not appear that any control measures were in place for these species.

Diversity:

Overall, the botanical diversity of the site is quite limited as the majority of the field is cultivated for wheat. Much of the river bank was dominated by Himalayan balsam and native species were limited.

Naturalness:

The River Dove flows along the southern site boundary, but the river bank vegetation is dominated by Himalayan balsam and therefore could not be described as a natural ecosystem.

Rare or Exceptional Features:

Although predominantly an arable field, the wetter areas are of some interest as they appear to have been left uncultivated and support some marshy grassland species.

Fragility:

The remaining native river bank vegetation is likely to disappear as the Himalayan balsam stand spreads upstream.

The majority of the site is already cultivated however the ephemeral pools/marshy grassland areas appear to be left uncultivated. The wetter areas are susceptible to changing drainage systems and water levels.

Typicalness:

Although most of the habitats on site are common in the Barnsley area, it is unusual to find ephemeral pools/marshy grassland areas in such a setting which have not been drained and cultivated.

Recorded History & Cultural Associations:

A disused and mostly in-filled canal curves around the northern boundary of the site in the northwest corner. The east boundary of the site is paralleled by a dismantled railway line.

Connectivity within the Landscape:

The site is well connected within the landscape by the River Dove, a disused canal, a dismantled railway line and hedgerows. It is linked to Wombwell Wood to the south-west.

Value for appreciation of Nature and Learning:

A public footpath runs through the north of the site, although the section of path offsite along the canal is difficult to access due to unmanaged dense vegetation. The site is close to Swaithe.

Recommendations:

As a stand-alone habitat unit, this site is of limited biological value. However, the River Dove passes through this site and preservation of this type of habitat along the river corridor is beneficial to the overall vitality of the Borough's wildlife. In combination with the nearby Wombwell Woods, it is a valuable addition to the Local Wildlife Site register.

In winter, when this site is flooded, it could provide feeding and overwintering grounds for wildfowl and waders. Bird species recorded in the area show a number of nationally important species.

The benefit of this site being selected as Local Wildlife Site would be to preserve a contiguous set of habitats along the river corridor. There is the potential for water vole (*Arvicola terrestris*) along the river banks and potentially along the corridor of the disused canal.

Further survey work is recommended to establish the value of the wet area to the west of the site. The open water and swamp/ marsh habitat could provide habitat suitable for water vole and amphibians.

Action:

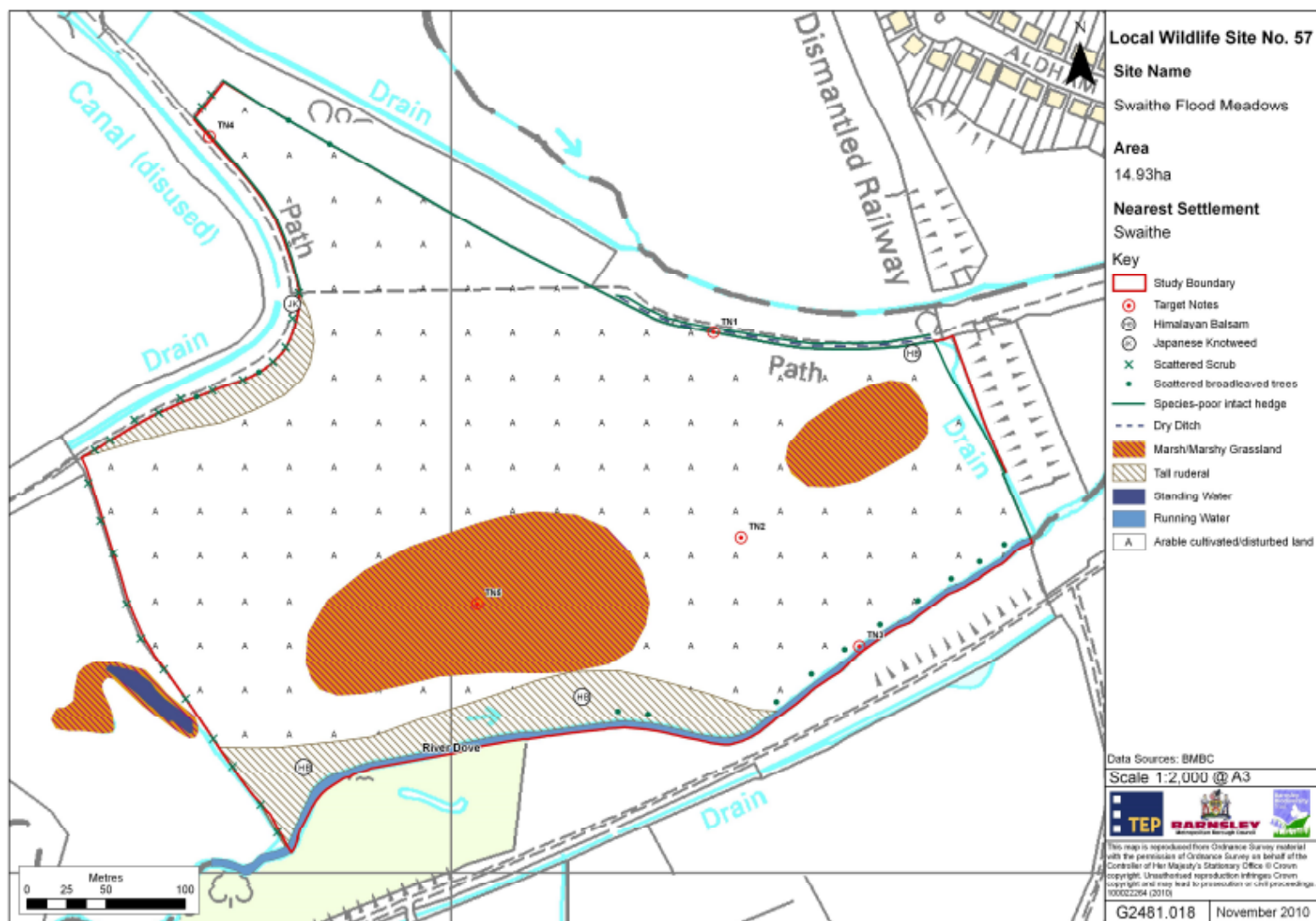
Adopt the site as a Local Wildlife Site

Work with the landowners/managers to preserve the wildlife interest through appropriate management

Expand the vegetation buffer along the river corridor

Seek to control the stands of Himalayan balsam

Carry out survey to establish the presence/absence of water vole



ABERDEEN

214 Union Street,
Aberdeen AB10 1TL
T: +44 (0)1224 517405

AYLESBURY

7 Wornal Park, Menmarsh Road,
Worminghall, Aylesbury,
Buckinghamshire HP18 9PH
T: +44 (0)1844 337380

BELFAST

Suite 1 Potters Quay, 5 Ravenhill Road,
Belfast BT6 8DN
T: +44 (0)28 9073 2493

BRADFORD-ON-AVON

Treenwood House, Rowden Lane,
Bradford-on-Avon, Wiltshire BA15 2AU
T: +44 (0)1225 309400

BRISTOL

Langford Lodge, 109 Pembroke Road,
Clifton, Bristol BS8 3EU
T: +44 (0)117 9064280

CAMBRIDGE

8 Stow Court, Stow-cum-Quy,
Cambridge CB25 9AS
T: +44 (0)1223 813805

CARDIFF

Fulmar House, Beignon Close, Ocean
Way, Cardiff CF24 5PB
T: +44 (0)29 20491010

CHELMSFORD

Unit 77, Waterhouse Business Centre,
2 Cromar Way, Chelmsford, Essex
CM1 2QE
T: +44 (0)1245 392170

DUBLIN

7 Dundrum Business Park, Windy
Arbour, Dundrum, Dublin 14 Ireland
T: +353 (0)1 2964667

EDINBURGH

No. 4 The Roundal, Roddinglaw
Business Park, Gogar, Edinburgh
EH12 9DB
T: +44 (0)131 3356830

EXETER

69 Polsloe Road, Exeter EX1 2NF
T: +44 (0)1392 490152

GLASGOW

4 Woodside Place, Charing Cross,
Glasgow G3 7QF
T: +44 (0)141 3535037

GUILDFORD

65 Woodbridge Road, Guildford
Surrey GU1 4RD
T: +44 (0)1483 889 800

LEEDS

Suite 1, Jason House, Kerry Hill,
Horsforth, Leeds LS18 4JR
T: +44 (0)113 2580650

LONDON

83 Victoria Street,
London, SW1H 0HW
T: +44 (0)203 691 5810

MAIDSTONE

19 Hollingworth Court, Turkey Mill,
Maidstone, Kent ME14 5PP
T: +44 (0)1622 609242

MANCHESTER

Digital World Centre, 1 Lowry Plaza,
The Quays, Salford, Manchester
M50 3UB
T: +44 (0)161 216 4064

NEWCASTLE UPON TYNE

Sailors Bethel, Horatio Street,
Newcastle-upon-Tyne NE1 2PE
T: +44 (0)191 2611966

NOTTINGHAM

Aspect House, Aspect Business Park,
Bennerley Road, Nottingham NG6 8WR
T: +44 (0)115 9647280

SHEFFIELD

Unit 2 Newton Business Centre,
Thorncliffe Park Estate, Newton
Chambers Road, Chapeltown,
Sheffield S35 2PW
T: +44 (0)114 2455153

SHREWSBURY

2nd Floor, Hermes House, Oxon
Business Park, Shrewsbury SY3 5HJ
T: +44 (0)1743 239250

STAFFORD

8 Parker Court, Staffordshire Technology
Park, Beaconside, Stafford ST18 0WP
T: +44 (0)1785 241755

STIRLING

No. 68 Stirling Business Centre,
Wellgreen, Stirling FK8 2DZ
T: +44 (0)1786 239900

WORCESTER

Suite 5, Brindley Court, Gresley Road,
Shire Business Park, Worcester WR4
9FD
T: +44 (0)1905 751310

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