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Ardsley House Hotel, Barnsley

Extended Phase I Habitat Survey and Bat Surveys

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Amberton Properties (Barnsley) Limited

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INTRODUCTION

1.1 Terms of Reference

SLR Consulting Limited was commissioned by Amberton Properties (Barnsley) Limited to undertake the following surveys at Ardsley House Hotel, Barnsley:

- Extended Phase I habitat survey (including desk study);
- Internal and external buildings inspection for bats; and
- Three dusk emergence and dawn re-entry bat detector surveys.

Ardsley House Hotel is located off Doncaster Road within the village of Ardsley, on the eastern outskirts of Barnsley (approximate central OS grid reference SE 3829 0553). It is proposed that the hotel building will be demolished in full in order to make way for a housing development.

1.2 Site Description

The site, encompassing the hotel building and grounds, lies close to the centre of Ardsley village, 5km east of Barnsley. The site is bordered to the north by Earlsmere Drive and Doncaster Road, to the west by residential housing, to the south by a block of woodland, and a track which leads to a crematorium, beyond which lies a row of residential houses along Roehampton Rise, and to the east by broad-leaved woodland interspersed with amenity grassland. Within the wider area lies further residential housing, particularly to the north and east, and farmland, which is predominantly arable in nature.

1.3 Relevant Legislation & Policy[1]

1.3.1 Legislation

The two principal pieces of legislation concerning the conservation of wildlife in England are the Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act 2006, and the Conservation (Habitats &c.) (Amended) Regulations 2007.

The Wildlife and Countryside Act 1981, as amended, 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). Amongst other things, the Wildlife and Countryside Act offers various forms of protection at the species level, by making it an offence (subject to exceptions) to:

- Intentionally kill, injure or take any wild bird or their eggs or nests (with exception to species listed under Schedule 2 of the Act);

[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.

- Disturb any bird species listed under Schedule 1 of the Act, or its dependent young while it is nesting; and
- Intentionally kill, injure or take any wild animal listed under Schedule 5 of the Act (these species include all native bats).

The Act also contains measures to prevent the establishment of non-native species by prohibiting the release or planting of animals and plants listed under Schedule 9.

The Conservation (Habitats &c.) (Amendment) Regulations 2007 (also known as the 'Habitat Regulations') implements Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (Habitats Directive). The Regulations offer further wildlife protection by making it an offence to do any of the following to any wild animal listed under Schedule 2 of the Regulations (which includes all British bat species):

- Deliberately capture or kill;
- Deliberately disturb;
- Damage or destroy a breeding site or resting place.

Any activity that would result in a contravention of the Wildlife and Countryside Act and/ or Habitat Regulations would require a European Protected Species Licence (EPSL) from Natural England to avoid committing an offence.

In addition, the Natural Environment and Rural Communities Act 2006 (the NERC Act) places a duty on authorities to have due regard for biodiversity and nature conservation during the course of their operations.

1.4 Policy

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.

The UK Biodiversity Action Plan (UKBAP) (Anon, 1995), organised to fulfil the Convention on Biological Diversity in 1992, to which the UK is a signatory, has produced a national priority species list with all species included having Species Action Plans. Regional and local BAPs

have also been organised to develop plans for species of nature conservation importance at regional and local levels.

Details of the Barnsley Biodiversity Action Plan (2008-2012), published by the Barnsley Biodiversity Trust (2009) can be found at:

http://www.barnsleybiodiversity.org.uk/Barnsley%20BAP%202008-12.pdf

2.0 METHODOLOGY

2.1 Desk Study

Relevant ecological records (statutory and non-statutory protected areas and protected or otherwise notable species) were obtained from the Barnsley Biological Records Centre (part of the Sheffield City Ecology Unit), for the site and 1.5 km radius.

2.2 Extended Phase I Habitat Survey

The Extended Phase I Habitat survey and mapping exercise was carried out on 28 August 2014 by experienced ecologists from SLR Consulting, using the standard Phase 1 Habitat assessment methodology, as recommended by Natural England (JNCC, 2012). This involved a systematic site walkover to classify and map all of the habitats on site. A plan showing the habitat types within the site boundary is provided as Drawing 1, within this report.

During the habitat survey, particular emphasis was placed on searching for habitats and features capable of supporting protected and notable wildlife species. In addition searches were undertaken for invasive species, including those listed on Schedule 9 of the Wildlife and Countryside Act 1981.

2.3 Internal and External Building Inspections for Bat Roost Potential

The hotel building, comprising the original hotel and newer extensions, and the shed in the north of the site, were inspected for evidence of roosting bats on 28 August 2014, by an experienced and Natural England licensed bat surveyor. The buildings were inspected externally to search for field evidence of roosting bats, including droppings, urine staining, feeding remains, and potential roosting and bat access/ egress points. Internal inspections were undertaken of all loft voids in the building, which included four separate loft voids. The various parts of the hotel complex were graded according to their bat roost potential, using the criteria detailed in Table 1.

Table 1: Categories of Bat Roost Potential

Category (Potential value)	Description
No/negligible value	Buildings with no or very few features capable of supporting roosting bats. Often buildings are of 'sound' well-sealed structure, or have a single skin and no roof void. They often have high internal light-levels, and little or no insulation. Buildings without roofs may fall into this category.
Low value	Buildings of largely unsuitable construction, but with few features of potential value to bats (e.g. a limited number of gaps above windows and/ or between roof tiles etc., leading to apparently shallow crevices). Buildings in this category may be surrounded by poor or sub-optimal bat foraging habitat, or subject to high levels of illumination, as is often the case in urban-centre locations.
Moderate	Buildings in this category are usually of brick or stone construction, with a number of features of obvious potential value to roosting bats e.g.

Category (Potential value)	Description
value	numerous loose roof/ ridge tiles, gaps in brickwork, gaps under fascia boards, and/ or warm sealed roof-spaces with under-felt.
High value	Buildings with a large number of features of obvious potential value to bats (as above) within a landscape which supports appreciable potential for foraging bats, such as woodland, parkland, or in close proximity to a large river or water body. Bats may be suspected to roost within the building (at least at certain times of year), but no supporting evidence found.
Confirmed roost	Bats discovered roosting within the building, or recorded emerging from/ entering the building at dusk and/ or dawn during bat detector surveys. Some buildings in this category may be found to contain concentrations of bat droppings (confirming the presence of a roost), even though bats may not be present at the time. A confirmed record (as supplied by an established source such as the local bat group) would also apply to this category.

2.4 Tree Inspections for bat Roost Potential

Mature/ semi-mature trees within 'Area A' and 'Area B' (see Drawing 1 for locations) were initially assessed from the ground in order to grade their potential for roosting bats on 15 September 2014, following the second edition of the Bat Conservation Trust's (BCT) Good Practice Guidelines[2]. The criteria used for the assessment of trees are provided in Table 2. A more detailed inspection using ladders, a torch, endoscope and binoculars was undertaken on 25 September 2014, in order to more closely inspect potential bat roosting features. Trees with appreciable bat potential were subject to a dusk emergence/ dawn re-entry survey, as detailed in Section 2.5.

Table 2: Description of Categories of Bat Roosting Potential on Trees

Category (Potential value)	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.

[2] Hundt, L. (2012) *Bat Surveys Good Practice Guidelines*. Second Edition. Bat Conservation Trust, London.

Category (Potential value)	Description
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.

2.5 Dusk Emergence and Dawn Re-Entry Surveys

Table 3 shows the dates in which the dusk and dawn bat detectors were carried out on the hotel building and the trees which were assessed as having potential to support roosting bats within Areas A and B (shown in Drawing 1). Table 3 also identifies the area that was surveyed during each survey session, and the number of surveyors that were present.

Table 3: The date, area surveyed and number of surveyors present of each bat detector survey session.

Date	Area Surveyed	No. of surveyors
27 August (dusk)	Hotel building – S and N aspect	2
28 August (dawn)	Hotel building – N, E, S & W aspect	2
15 September (dusk)	Hotel building – N, E & S aspect	2
16 September (dawn)	Hotel building – N, E, S & W aspect	2
25 September (dusk)	Trees in Areas A and B	3
26 September (dawn)	Trees in Areas A and B	3
09 October (dusk)	Hotel building – S & W aspect	2
10 October (dawn)	Hotel building – S & W aspect	2
16 October (dusk)	Hotel building – S & W aspect	3

The building was assessed as having high potential for roosting bats, and therefore required three dusk/dawn surveys in order to comply with BCT Good Practice guidelines (Hundt, 2012). However, a fourth survey was undertaken in mid-October, to gather more information on the number of bats using a suspected maternity roost, which had been recorded earlier in the year (refer to Section 3.2.4).

Nine trees were assessed as having potential to support roosting bats during the initial ground-based inspection; these were subject to a single dusk and dawn survey during September 2014.

The dusk emergence surveys commenced 15 minutes before sunset and lasted for two hours. The dawn surveys commenced 1.5 hours before local sunrise, ending at sunrise.

During the surveys the surveyors were strategically positioned around the building and/ or trees, so as to be able to observe any bats leaving or entering their roosts, if roosts were present. All observed bat passes were recorded on a detailed plan of the site; noting the time, the location and, where possible, the direction of flight, species and behaviour of the bat (i.e. commuting, foraging, social calling). Surveyors were equipped with a Duet (Batbox Ltd) combined frequency division and heterodyne bat detector connected to a Creative Zen Nano MP3 recorder.

Temperature, wind speed/ direction and cloud cover were recorded at the beginning and end of each survey session, along with any significant weather changes during the survey (e.g. heavy, intermittent showers).

The prevailing weather conditions during each survey are presented in Table 4.

Table 4: Weather conditions during dusk and dawn bat detector surveys

Date	Time	Temp (^{0}C)	Rainfall	Cloud Cover	Wind Speed	Wind Direction
27 August (dusk)	19.53 hrs-21.53 hrs	15 at start 14 at finish	None throughout	8/8 throughout	Light breeze throughout	NE
28 August (dawn)	04.55 hrs-06.25 hrs	12 at start 13 at finish	None throughout	8/8 throughout	Gentle breeze throughout	NE
15 Sep (dusk)	18.52 hrs-19.22 hrs	15 at start 13 at finish	None throughout	8/8 throughout	Calm throughout	N/A
16 Sep (dawn)	05.10 hrs-06.40 hrs	15 throughout	None throughout	8/8 throughout	Calm throughout	N/A
25 Sep (dusk)	18.30 hrs– 20.30 hrs	17 at start 16 at finish	None throughout	5/8 at start 8/8 at finish	Light air throughout	W
26 Sep (dawn)	05.25 hrs-06.55 hrs	15 throughout	None throughout	7/8 at start 3/8 at finish	Calm at start Light air at finish	W
09 October (dusk)	18.08 hrs-20.08 hrs	12 at start 9 at finish	None throughout	6/8 at start 2/8 at finish	Moderate breeze at start Light breeze at finish	SW
10 October (dawn)	05.50 hrs-07.20 hrs	9 at start 8 at finish	None throughout	0/8 at start 3/8 at finish	Calm throughout	N/A
16 October (dusk)	17.52 hrs-19.22 hrs	16 throughout	Light rain (last hour of survey)	4/8 at start 8/8 at finish	Calm throughout	N/A

2.6 Limitations

Desk study data is not likely to be exhaustive 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 proposed development site.

2.7 Quality Assurance & Environmental Management

All ecologists employed by SLR Consulting Ltd are members of, or are under application for, membership of the Chartered Institute of Ecology and Environmental Management (CIEEM) and follow the Institute's code of professional conduct when undertaking ecological work.

3.0 RESULTS

3.1 Desk Study

A complete account of the desk study information received is contained in Appendix B of this report. A summary of this information is provided below.

3.1.1 Statutory Sites

Stairfoot Brickworks Site of Special Scientific Interest (SSSI) lies 1km south of the site, and is designated for its geological interest, as it contains exposures of the Aegiranum Marine Band, which holds fish, bivalve and ammonoid fossils. This SSSI was not designated on account of its ecological criteria *per se*, No further statutory protected areas lie within a 1.5km radius of the site.

3.1.2 Non-statutory Sites

Three non-statutory sites (Local Natures Sites) lie within a 1.5km radius of the application site. The closest cluster of these is Sunny Bank, Horse Carr and Storrs Wood, which comprises five separate areas of broad-leaved semi-natural woodland which are connected through tree lined fields, tracks and disused railways. The sites lie between 0.5km and 1.8km north and north-east of application site. The connected woodlands are particularly notable for their ancient woodland indicator species, as well as kingfisher *Alcedo atthis*, and otter *Lutra lutra*. Approximately 0.8km north-west of the site lies Stairfoot Disused Railway LWS, which supports a range of species-rich grasslands, scrub, woodland, bracken stands, swamp and open water. Swaithe Flood Meadows LWS lies 1.2km south of the application site, which is a candidate Local Nature Site, and contains an arable field and a section of the bank of the River Dove. The site supports habitat for wintering wildfowl and waders.

3.1.3 Protected species

A total of 338 records of protected and notable species were provided for the desk study search area. Of these, 307 were for birds, 21 were for bats, and 10 were for other taxa including terrestrial and riparian mammals, and invertebrates.

Bat Records

A total of 21 bat records were returned, comprising four species, namely common pipistrelle *Pipistrellus pipistrellus*, noctule *Nyctalus noctula*, Daubenton's *Myotis daubentonii,* and Natterer's *Myotis nattereri*. Two records that related to bats were not species specific. The most commonly recorded bat was the common pipistrelle, and 14 records were returned for this particular species dating between 1990 and 2010. The closest records returned were from woodland 100m north-east of the site, dating from 1992 and 2000. Two records related to noctule, the first lying approximately 0.7km south of site, and dating from 1990, and the second1.1km south-east of site, dating from 2000. Two records were returned for Daubenton's, both from Ardsley Railway Tunnel, 0.9km north-west of site, dating from 1994. A single record was returned for Natterer's, also from Ardsley Railway Tunnel, dating from 1989.

Bird Records

A total of 307 bird records were returned, relating to 50 species in total, and 49 Birds of Conservation Concern (BoCC). The majority of the records provided relate to 'farmland' and 'garden' birds, including two records of corn bunting *Emberiza calandra* from Swaithe, 1.9km south-west of site, dating from 1994; and 22 for house sparrow *Passer domesticus,* the most recent record relating to Pearson Crescent, 1.5km south of site, in 2013.

Several records relate to waders, including seven records of green sandpipier *Tringa ochropus* and three records for greenshank *Tringa nebularia,* from Swaithe, 1.9km south-west of site, dating between 1994 and 1999.

A single record was provided for merlin *Falco columbarius* and kingfisher *Alcedo atthis* both for Swaithe, 1.9km south-west of site, in 1995. A single record was also returned for black redstart *Phoenicurus ochruros* at the same location in 1996. Barn owl *Tyto alba* was recorded at Swaithe Flood Meadows (1.2km south of site) in 2005.

Several records also relate to winter thrushes, with the most recent (of two) redwing *Turdus iliacus* records relating to Aldham Mill (1.5km south of site) in 2013, and the most recent (of four) fieldfare *Turdus pilaris* records relating to Swaithe (1.9km south-west of site) in 2004.

Other taxa

Five records were returned for badger *Meles meles*, three of these from Horse Carr Wood, located approximately 1km north-east of site, with the remaining two relating to land circa 1.4km south of application site, dating from between 1981 and 2013.

Three records relate to otter *Lutra lutra* on the River Dearne, approximately 1.1km north of the site, dating from 2005. Two records relate to white-clawed crayfish *Austropotamobius pallipes*, also on the River Dearne, 1.3km north-west of site, dating from 2012.

No amphibian or reptile records were returned, including any for great crested newt *Triturus cristatus*.

The remaining records relate to butterflies and moths.

3.2 Field Survey

3.2.1 Extended Phase I Habitat Survey

The habitat types present on site are illustrated in Drawing 1.

The site contains a large hotel building, consisting of an original stone-built hotel, with modern brick-built extensions to the east, south-east and west. A small wooden shed is present in the northern part of the site. The hotel is surrounded to the north and south-east by a large car park, and areas of amenity grassland occur to the south, west and north of the hotel. A series of scattered trees occur within and (predominantly) around the boundaries of the site, and an area of broad-leaved woodland is located to the south-west. Areas of dense scrub and hedgerow occur along the site boundaries. Small areas of introduced shrub are present around the site, comprising areas of formal landscaping.

An area of broad-leaved woodland immediately surrounds the site to the east, south and west, Doncaster Road borders the site to the north, and a small residential area is present to the north-west. In the wider area, the residential areas of Ardsley are located to the north, west and south, with agricultural fields present beyond this, particularly to the east. The larger town of Barnsley is situated to the west.

Buildings

The hotel building is located in the centre of the site. It consists of an original two to three-storey stone building (Plate 1) and newer brick-built extensions to the east (Plate 2), south-east (Plate 3) and west (Plate 4). A small wooden shed is located in the north of the site (Plate 5).

Section 3.2.2 of this report provides further details of the hotel building complex, and in particular, the potential of these areas to support roosting bats.



Plate 1*: View of the northern side of the original stone hotel building. Photograph taken from the main car park looking south.*



***Plate 2**: View (looking north-west) of the three-storey extension built onto the eastern side of the original hotel.*



***Plate 3**: View (looking north-east) of single-storey extension built to the south-east of the original hotel.*



***Plate 4**: View (looking south) of three-storey extension built to the west of the original hotel.*



***Plate 5**: View (looking north) of small wooden shed located in the north of the site.*

Amenity Grassland

Areas of previously well-maintained amenity grassland are present to the south (Plates 6 and 7), west (Plate 8) and north (Plate 9) of the hotel building. Species present within the sward include perennial rye grass *Lolium perenne*, white clover *Trifolium repens*, dandelion *Taraxacum officinale agg*, creeping buttercup *Ranunculus repens,* daisy *Bellis perennis*, ribwort plantain *Plantago lanceolata* and Shepherd's purse *Capsella bursa-pastoris*.



***Plate 6**: View (looking west) of amenity grassland to the south-east of the hotel.*



***Plate 7**: View (looking north) of amenity grassland to the south-west of the hotel.*



***Plate 8**: View (looking north-west) of amenity grassland to the west of the hotel.*



***Plate 9**: View (looking north) of a small area of amenity grassland to the north of the hotel.*

Hard Standing

A large car park is located to the north and south-east of the hotel, consisting of hard-standing (Plate 10). Hard standing also extends along the eastern side of the hotel building, providing a drive-way into the neighbouring property, and to the north of the hotel building where a courtyard and staff parking are located.



***Plate 10**: View of the car park to the north of the hotel building, looking north-west.*

Introduced Shrub

Small areas of introduced shrub occur around the borders of the site and adjacent to the hotel building, comprising areas of formal landscaping. Species present include butterfly bush *Buddleja* sp., cherry laurel *Prunus laurocerasus*, lavender *Lavandula* sp. and roses *Rosa* sp.

Scattered Trees, Woodland, Scrub and Hedgerows

A series of scattered trees are present within the site, predominantly along the site boundaries. Species present included horse chestnut *Aesculus hippocastanum*, London plane *Platanus x hispanica*, *Prunus* sp., sycamore *Acer pseudoplatanus*, elder *Sambucus nigra*, beech *Fagus sylvatica*, oak *Quercus robur* and ash *Fraxinus execelsior*.

An area of broad-leaved woodland is present to the south-west of the hotel (Plate 11). This area contains several mature trees including lime *Tilia* sp., horse chestnut, sycamore, elm *Ulmus* sp., ash, beech and oak. Smaller trees/ areas of scrub, consisting of hawthorn *Crataegus monogyna*, holly *Ilex aquifolium* and elder were also present. The understorey comprises amenity grassland and introduced shrub.

Section 3.2.3 of this report provides further details of these trees, and describes their potential to support roosting bats.

Areas of dense scrub occur around the boundaries of the site, comprising sycamore, holly, ivy *Hedera helix*, elder, hawthorn and ash (Plate 12).

Two short hawthorn hedgerows are present in the north-east and south-east of the site (Plate 13). Two coniferous hedgerows are located along the northern site boundary, and to the south of the hotel building.



***Plate 11**: View of the broad-leaved woodland in the south west of the site, looking west.*



***Plate 12**: View of ash and sycamore scrub along the southern boundary of the site.*



***Plate 13**: Hawthorn hedgerow located along the south-eastern site boundary.*



***Plate 13**: Coniferous hedgerow located along the northern boundary of the site.*

3.2.2 Buildings Inspections for Bat Roost Potential

The hotel building, comprising the original stone hotel and more modern brick extensions, and the shed in the north of the site, were assessed for their potential to support roosting bats. The original hotel building (Plate 1) comprises a three-storey building of stone construction. A series of brick-built modern extensions are located to the east, south and west of the original hotel, varying between one to three-storeys (Plates 2, 3 and 4). The hotel building is no longer in use and is under 24 hour security surveillance.

External Inspection

The hotel building was found to have some external features which are suitable for roosting bats. In the main, the stonework of the original hotel was in good condition and well-mortared, however, two chimneys contained gaps where mortar was missing (Plate 14), a small area of missing mortar was present on the southern side of the original building (Plate 15), and a vertical gap where mortar is missing was present on the western side (Plate 16).

A small gap under a ridge tile on the western side of the brick extension to the south-east of the original hotel provided a small crevice suitable for small numbers of roosting bats (Plate 17). Although not clearly visible during the building inspection due to its height and orientation, a bat roost was confirmed where a vertical gap was present on the south-western side of the eastern brick extension (Plate 18, showing view from the roof of an adjacent section of the building). This is further discussed in Section 3.2.4.

Despite a thorough search, no evidence of occupation by bats, such as bat droppings, were found during the initial external inspection of the building.



***Plate 14**: View (looking south) of areas of missing mortar within the chimneys on north side of original hotel building.*



***Plate 15**: View (looking north-east) of missing mortar on southern side of original hotel.*



***Plate 16**: View (looking east) of missing mortar on western side of original hotel.*



***Plate 17**: View (looking east) of missing mortar between ridge tiles on the northern brick extension.*



Plate 18: *View of confirmed bat roost on south-western side of eastern extension, as viewed from the roof of an adjacent section of the building. See section 3.2.4 for more details.*

Internal Inspection

Four main areas of loft space/ roof void within the hotel building were accessed and assessed for bats/ evidence of bat occupation:

- A loft space was accessed via a loft hatch adjacent to Room 105 of the hotel (Plate 19). Upon close inspection this loft void was found to be well boarded and plastered, with breeze block walls. No insulation was present and no potential bat access/ egress points were identified. The space provided access to various pipework required for hotel maintenance;
- A loft space was accessed above the spa area, within the newer south-eastern extension to the hotel (Plate 20). This was in recent use as a storage area and was fitted with strobe lighting. The wooden beams/ battens and underfelt were clean and in good condition. No loft insulation was present. Some gaps were present at eaves level, providing potential access/ egress points for bats;
- A loft space was accessed adjacent to the gym located within the newer south-eastern extension to the hotel (Plate 21). This area contained insulation and underfelt, with wooden beams and battens in good condition. No potential bat access/ egress points were identified;
- A roof void within the swimming pool pump house, in the south-eastern extension of the hotel was inspected (Plate 22). The interior was of breeze block construction with wooden beams supporting the roof. No flooring was present, thus leaving an open void, rather than an enclosed loft space. The door to the pump house is normally closed and no potential access/ egress points for bats were identified.

No bats or signs of bats were found within any of the loft spaces described above.



Plate 19: *Interior of loft space accessed via hatch adjacent to Room 105.*



Plate 20: *Interior of loft space within spa area (south-eastern newer extension).*



Plate 21: *Interior of loft space adjacent to gym (south-eastern newer extension).*



Plate 22: *Interior of roof void within swimming pool pump house (south-eastern extension).*

Assessment of Bat Roosting Potential

The hotel building contained some external features providing suitable crevices for roosting bats, particularly on the original stone hotel building, and on the south-eastern and eastern brick extensions. Although suitable loft spaces were present within the building, no obvious potential bat access/ egress points were identified in relation to most of these loft spaces (except for the loft space above the spa) and no bats/ signs of bats were found within any of them.

The hotel is located adjacent to areas of broad-leaved woodland, which lie to the east, south and west, providing good quality foraging habitat for bats. The hotel was assessed as having high potential to support roosting bats overall.

After the first two dusk/ dawn surveys, a significant bat roost was identified within the south-western corner of the eastern extension (Plate 18), which is discussed in further detail in Section 3.2.4, and therefore the building was upgraded to 'confirmed roost' status.

The shed to the north of the site did not provide any suitable features for roosting bats. Therefore, it is assessed as having negligible potential to support roosting bats.

3.2.3 Tree Inspection for Bats

Nine trees within areas known as ‘Area A’ and ‘Area B’ were subject to detailed inspection using binoculars and ladders where necessary to closely inspect potential bat roosting features. The results of the inspection are shown within Table 3 below. Following this, the trees were subject to a dusk emergence and dawn re-entry survey, as detailed in Section 3.2.4.

Table 3: Results of Assessment of Trees for Bat Roosting Potential

Tree No.	Species	Initial description of Features with Bat Potential (viewed from ground) – 15.09.14	Initial Bat Potential Assessment – 15.09.14	Results of Detailed Inspection (using ladders, torch, endoscope, and binoculars) – 25.09.14	Photograph
1	Horse chestnut	Rot hole present at top of trunk.	High (Category 1*)	Rot hole on top of trunk is upward facing and therefore water ingress is possible. Trunk found to be partly hollow from top but filled with leaves and cobwebbed. Potential woodpecker hole located on branch higher up is upward facing and contains cobwebs. No evidence of bats found.	
2	Horse chestnut	Rot hole leading to cavity within trunk (north-facing) at 1 m high from ground. Peeling bark present. Bird box on western side.	High (Category 1*)	Cavity within trunk inspected using endoscope and torch – no bats/ signs of bats found. A hole higher up on the southern side was found to contain an old bird nest and bird droppings. Peeling bark was generally cobwebbed and did not provide sufficient depth for bats. Bird box inspected with endoscope, whereby no evidence of bats found.	
3	London Plane	Mature tree with some peeling bark, potentially with cracks/ crevices present at an elevated level that could not be viewed from the ground.	Moderate (Category 1)	Tree was too tall to be thoroughly inspected with ladders. No evidence of bats found under peeling bark and no obvious cracks/ crevices could were identified.	

Tree No.	Species	Initial description of Features with Bat Potential (viewed from ground) – 15.09.14	Initial Bat Potential Assessment – 15.09.14	Results of Detailed Inspection (using ladders, torch, endoscope, and binoculars) – 25.09.14	Photograph
4	Oak	Cracked and peeling branch. Approximately 7 m high, facing south-west.	Low (Category 2)	Branch too high to inspect closely.	
5	Beech	Several 'dropped' and 'snagged' branches. Rot holes on western side. Wound on north-facing side, with possible bat access.	Moderate (Category 1)	Inspected with binoculars. Rot hole and wound do not appear to go in far. Snagged branches too high to be closely inspected.	
6	Horse chestnut	Peeling bark and large split on north-facing side.	Moderate (Category 1)	Bark inspected using torch. No evidence of bats found, cobwebbed over in places.	

Tree No.	Species	Initial description of Features with Bat Potential (viewed from ground) – 15.09.14	Initial Bat Potential Assessment – 15.09.14	Results of Detailed Inspection (using ladders, torch, endoscope, and binoculars) – 25.09.14	Photograph
7	Horse chestnut	Rot hole on south-facing side, 3 m from ground, raised bark, and crack on eastern side.	Moderate (Category 1)	Rot hole inspected using endoscope and torch – found to be upward facing, with a small sheltered section; the rot hole was damp inside and appears to be subject to water ingress. A cluster of approximately 20 slugs were resting inside. No evidence of bats was found under raised bark/ crack.	
8	Horse chestnut	Bird box present with enlarged entrance. Some rot holes present.	Low (Category 2)	Bird box inspected using torch and endoscope. Found to be empty with no bats/ signs of bats. No evidence of bats found within rot holes.	
9	Lime	A few dead branches in upper canopy, some raised bark, large sear on western side.	Low (Category 2)	Tear on western side did not provide crevices deep enough for bats. A small area of raised bark where one limb meets the trunk , was inspected and could provide a potential crevice for a small number of bats.	

3.2.4 Dusk Emergence and Dawn Re-entry Survey Results

Hotel Building

Survey visit 1 (27/ 28 August 2014)

The first survey of the hotel building was carried out on the evening of 27 August and the morning of 28 August 2014 by two ecologists.

No bats were directly observed emerging from the hotel building during the evening survey, however a number of common pipistrelle bats were recorded within close proximity to the hotel building on the southern aspect, over the flat-roofed section of the building. The earliest common pipistrelle bat was recorded at 20.04, four minutes before local sunset. A common pipistrelle was also recorded within the same area (near the flat roof section of the building on the southern side) two minutes and four minutes after the first bat. Common pipistrelle bats were also observed flying close to the hotel building and then towards woodland at the south and east of the site 15 and 25 minutes after local sunset. The timing of these records, and the fact that the bats were flying close to the hotel building, strongly suggest that a roost is present within the immediate area. The exact location of this roost was established in survey visit 2 (see overleaf).

Common pipistrelle foraging activity was high in the woodland to the south of the hotel building, and regular foraging bouts were recorded within this area for the remainder of the dusk survey. Activity was lower on the northern side of the hotel building, where only distant foraging passes were recorded, probably from the wooded area to the east of site.

Six noctule passes were also recorded during the evening survey, the earliest record made at 20.07 hrs, one minute before local sunset, where two noctules were observed flying northwards, high above the hotel building (they did not emerge from the building itself).

During the dawn survey, two common pipistrelle bats were observed circling the flat-roof section of the building on the southern side, where the southern-most extension joins the main hotel building, at 05.31 hrs. A further five common pipistrelle bats were observed foraging in the same area at 05.34 hrs. The behaviour of the bats in this area suggested that a roost was likely to be present nearby (although the exact roosting location was not identified during visit 1, it was later identified in visit 2 – see overleaf). At 05.51 hrs, a common pipistrelle was recorded flying southwards above the hotel building and towards the woodland to the south. Again, activity was lower to the north of the hotel, where just two distant passes were heard. Two noctule bats were recorded, and both involved bats which were seen to fly high above the hotel building in a southerly direction.

During the dusk/ dawn survey it was noticed that significant light-spill occurred on the northern aspect of the building (Plate 23), reducing the suitability of this section of the building for roosting bats.



Plate 23: *Light spill onto northern aspect of hotel building.*

Survey visit 2 (15/ 16 September 2014)

The second survey was carried out on the evening of 15 September and the morning of 16 September 2014 by two ecologists.

During the evening survey, **16 soprano pipistrelle bats were recorded emerging from the hotel building**, from a tear in the roof, on the south-western aspect of the newer eastern extension to the main hotel building (Plates 18 & 24). Refer to Drawing 2 for the exact location of the roost. The first three bats emerged at 19.28 hrs, four minutes after local sunset. Single bats emerged at 19.31 hrs and 19.34 hrs, two bats emerged at 19.38 hrs, one emerged at 19.39 hrs, a further three emerged at 19.41 hrs, and singles emerged at 19.42, 19.44, 19.47 and 19.49 hrs, and the last bat emerged at 19.52 hrs (28 minutes after local sunset). The bats did not echolocate whilst leaving the roost, and therefore it was not possible to determine which species of pipistrelle bat they were, however these were confirmed to be soprano pipistrelle *Pipistrellus pygmaeus* bats in the dawn survey (see overleaf) . Approximately 110 droppings were found to be present on the wall and roof below the roost. These droppings could only be seen from the roof, and so were not identified in the original external building survey, which was undertaken from the ground.



***Plate 24**: Photograph showing a close-up view of the soprano pipistrelle roost, under a tear in the panelling near the top of the roof, on the south-western aspect of the newer eastern extension to the main hotel building (see Drawing 2 for exact location).*

Moderate levels of common pipistrelle foraging activity were recorded along the eastern boundary of the site and above the grassland near the south-east corner of the building. A single noctule was recorded flying high over the trees to the south of the hotel building at 19.56 HRS.

During the dawn survey, eight soprano pipistrelle bats were observed re-entering the roost via the tear in the roof (Plate 24, Drawing 2). The first bat returned to the roost at 06.22 hrs, 18 minutes before sunrise, and the last bat re-entered the roost at 06.32 hrs, eight minutes before sunrise. The bats spent approximately 15 minutes circling close to the entrance of the roost before re-entering, and were emitting social calls.

Common pipistrelle foraging was observed along the tree-lines to the east and south borders of the hotel building. No bat activity was recorded to the north of the building during the dawn survey, and no bats were seen entering roosts at any other locations on the building apart from that shown in Plate 24.

Survey visit 3 (9/ 10 October 2014)

The third survey of the hotel building was carried out on the evening of 9 October and dawn of 10 October 2014 by two ecologists. The purpose of the survey was to further characterise the soprano pipistrelle roost, and assess the level of fragmentation which has occurred since the first two survey sessions. The southern and western aspects of the hotel building were surveyed.

Three pipistrelle bats were observed emerging from the same location as in previous surveys (Plates 18 & 24, Drawing 2). The first pipistrelle bat emerged at 18.38 hrs, 14 minutes after local sunset, and was not echolocating. The second and third bat emerged at 18.52 and 18.58, hrs were both echolocating, and were identified as being soprano pipistrelle bats.

Common and soprano foraging activity was almost continuous throughout the last hour of survey, particularly alongside and amongst the trees to the south and west of the hotel building. At least four bats were recorded foraging within the area at any one time, with an approximate split of four common pipistrelle bats to every soprano pipistrelle bat recorded.

No bats were recorded re-entering the roost during the dawn survey. It is more common for bats to re-enter roosts earlier on in the night in October, particularly on cold nights. Therefore it is considered likely that the bats observed emerging from the roost in the evening survey had already re-entered the roost during the night prior to the start of the dawn survey (which commenced 1.5 hrs before local sunrise).

Bat activity was much lower in the dawn survey, when a total of only five bats were recorded during the survey, all of them common pipistrelle. One of these common pipistrelle bats was recorded foraging close to the south-western corner of the hotel building for approximately three minutes.

Survey visit 4 (16 October 2014)

A final dusk survey was carried out on the evening of 16 October 2014 by three ecologists, in order to further assess the level of fragmentation of the roost. The southern and western aspects of the hotel building were surveyed.

A single pipistrelle bat was recorded emerging from the roost shown in Plate 24 at 18.48 hrs, 41 minutes after local sunset. The bat did not echolocate whilst leaving the roost. No further bats were recorded emerging from the roost, or from any other areas of the building.

Foraging activity was again very high amongst the trees to the south and west of the hotel building: regular common pipistrelle foraging and occasional soprano pipistrelle foraging. Noctule was also recorded commuting across the site.

Trees

Survey visit 1 (25/26 September 2014)

A survey of the nine trees which were assessed as having potential to support roosting bats, in Area A and Area B (Drawing 2), were surveyed on the evening of 25 September and the morning of 26 September 2014 by three ecologists.

No bats were observed emerging from any of the trees surveyed.

During the evening survey, common and soprano pipistrelle foraging activity was very high in Area B. Foraging was almost continuous in the last hour of survey, where between one and two individuals of each species were seen at any one time. Bat activity was much lower at Area A, where only three common pipistrelle passes were recorded.

During the dawn survey, no bats were observed re-entering any of the trees surveyed.

Common and soprano foraging activity was again very high in Area B. Most common pipistrelle activity was concentrated in the western half of Area B, and most soprano pipistrelle activity was concentrated in the eastern half of Area B. No bat activity was recorded in Area A.

During the dusk/ dawn survey, it was noted that the trees within Area B (see Drawing 1) received some light spill from the adjacent hotel building (Plate 25). Trees 4 and 5 (oak and beech) received light spill from the north. Trees 6 and 7 (horse chestnuts) received light spill from the west, although the eastern sides of these trees were darker. Trees 8 and 9 (horse chestnut and lime) were not lit on their western sides but they were well-lit on their eastern sides. As such, much of the bat foraging activity observed was confined to darker areas and higher up within the tree canopies in this area. Similarly, a lamp post adjacent to Area A, resulted in light spill onto Tree 3 (Plate 26).



Plate 25: *Light spill onto trees within Area B (see Drawing 1).*



Plate 26: *Light spill onto trees within Area A (see Drawing 1).*

3.2.5 Breeding Birds

No birds were observed nesting within the building at the time of survey. The grounds offer nesting opportunities for a range of 'garden' and 'woodland' birds, within the broad-leaved woodland to the south and west of the hotel building, within the scattered trees across the site, and within the dense scrub, introduced shrub and sections of hedgerow along the borders of the site. Two juvenile tawny owls *Strix aluco* were heard calling from trees to the south of the hotel building during the dusk survey on 27 August 2014. A tawny owl was also heard calling from the broad-leaved woodland to the west of the hotel building during the dawn bat detector survey on 16 September 2014.

A bird box has been erected on Tree 2 (in Area A), which contains an old nest and bird droppings, and Tree 8 (in Area B) which does not contain a bird's nest.

A great tit *Parus major* was seen entering a hollow pipe in the north-western part of the site, to rest/ sleep during the night, during the dusk emergence survey undertaken on the 9 October 2014. This hollow pipe did not appear large enough to support nesting by this species, but the hotel may contain other cavities which are more suitable for nesting by this, and other bird species.

3.2.6 Reptiles and Amphibians

The site does not contain suitable breeding habitat for great crested newt *Triturus cristatus,* as there are no water bodies present within, or immediately adjacent to the site. Furthermore, no records for great crested newt were returned within a 1.5km radius of the site boundary. The closest known ponds to site are situated within Horse Carr Wood, approximately 1km north of the site, too far from the site for great crested newt to disperse to the site from, if indeed, they occur within this pond. The broad-leaved woodland to the south and west of the hotel building occurs within/ grows above amenity grassland, therefore providing sub-optimal conditions for this species, even if great crested newt do occur in the local area.

The site also does not appear to have any appreciable potential to support reptiles; as it is devoid of rough-grassland habitats or rough grassland/ scrub mosaics, preferred by reptiles. No reptile records were returned from the desk study, either for the site, or land within a 1.5km radius of the site.

3.2.7 Other Protected Species

The site contains suitable foraging habitat for badger *Meles meles* however no field signs, including setts, were found, despite a thorough survey.

The site contains no suitable habitat for water vole *Arvicola amphibious* or otter *Lutra lutra*, as it does not contain any water courses

4.0 DISCUSSION & RECOMMENDATIONS

4.1 Habitats

Ardsley House Hotel contains a limited range of habitat types, of value to biodiversity. Over half of the site comprises the hotel building and a large hard standing car park. Areas of dense scrub, introduced shrub, scattered trees and hedgerow are situated along the borders of the site, and an area of broad-leaved woodland is located to the south and west of the hotel building, growing within amenity grassland. The woodland and border habitat provide favourable foraging opportunities for bats, as well as for nesting birds. The site does not provide suitable habitat for reptiles or amphibians. No evidence of other protected species was found during survey.

4.2 Bats

Confirmed bat roosts within buildings

A soprano pipistrelle roost has been confirmed within the hotel building, within a tear in the roof on the south-western aspect of the newer eastern extension to the main hotel building (Drawing 2). A peak count of 16 bats was observed emerging from the roost during the September survey, and eight bats were observed returning to the roost the following dawn.

Although no bats were directly observed emerging from or re-entering the building during the August survey, the survey was carried out from ground level, from where it was difficult to see the exact section of roof containing the roost. Pipistrelle bats were recorded circling close to the section of roof where the roost was later confirmed, and it is considered almost certain that the roost was present at the same location during the August survey. All subsequent surveys were carried out from on the roof, where a clear view of the roost could be seen.

The presence of at least 16 individuals in the roost in the September survey strongly indicates that it is a maternity colony, which had already started to 'fragment' by late August/ early September. Soprano pipistrelle maternity colonies usually form in May, and are occupied almost entirely by females, who give birth to a single young from early June to August. The young can forage independently after approximately six weeks, shortly after which the maternity colony begins to disperse, usually in August and September. The average colony size for soprano pipistrelle is 288 bats (BCT, 2005). It is likely that a larger number of bats were present at the roost earlier on in the summer, particularly in June and July when it is likely to have reached its peak size. It appears that the roost was in the process of dispersing or fragmenting during the series of surveys carried out between August and October 2014. Since the September survey, where a peak count of 16 bats were recorded emerging from the roost, the number of bats at the roost declined, in line with what would be expected with a fragmenting maternity colony. Three bats were recorded emerging from the roost during the 9 October survey, and only one bat was recorded emerging in the 16 October survey. Therefore it is considered unlikely that the roost is used through winter.

A European Protected Species Licence (EPSL) would need to be obtained from Natural England before demolition of the area of the building containing the soprano pipistrelle roost could take place (refer to Drawing 2).

The EPSL application would need to include a detailed Method Statement, describing how the works would be undertaken in a manner that would avoid harming bats, along with the measures that would be taken to compensate for the loss of the original roost. Considering that the roost within the building is most likely to be a maternity colony, a comprehensive mitigation strategy would need to be applied, in order to ensure that alternative roosting opportunities, suitable for a maternity colony, are provided.

This could involve the creation of a purpose-built 'bat loft' within one of the new buildings, whereby several access points are created via features such as raised tiles with slits in the roofing membrane directly underneath. The 'bat loft' would need to contain features which would be suitable for a maternity colony, such as specially designed bat boxes. In addition, it is recommended that a non-breathable roofing membrane should be used across the entire new-build, to ensure that bats do not become entangled within the membrane; refer to http://www.batsandbrms.co.uk for more information.

Mitigation might also involve the erection of bat boxes on mature trees around the site, and/ or the incorporation of a large number of bat tubes into the new buildings. It will also be necessary to retain bat foraging habitat, and commuting corridors to the wider landscape, by creating/ maintaining 'dark corridors' within the site where low-level sensitive lighting is used.

Further information on the range of roosting features available commercially, may be found at http://www.nhbs.com/browse/subject/421/bat-boxes.

Roosts were only confirmed in the newer eastern extension, and therefore only this section of the building requires an EPSL before works can commence. However, the rest of the building has features that offer potential for roosting bats. Pipistrelle bats tend to move irregularly between several sites in a small area whilst breeding in the summer months, and therefore it is possible that small roosts are used periodically in other sections of the building. As a precautionary principle, a further 'confirmatory' dusk/ dawn bat detector survey should take place before demolition commences.

Furthermore, a sensitive demolition protocol should be followed in order to minimise the risk of killing or injuring bats during building works. Sensitive demolition will involve the careful hand-removal of ridge tiles, facia boards, soffit boxes, hanging tiles, lead flashing and loose roof tiles. Should bats, or signs of bats (such as droppings) be found, work should stop locally and an ecologists consulted.

Refer to Appendix B for a protocol for working in areas that might support bats.

Impact upon the bat foraging resource

An arboricultural report (produced by Quaife Woodlands Arboricultural and Woodland Consultants, November 2014 ref AR/3254dsL1/jq) recommends the retention of 52 of the 75 trees on site. Of the 23 trees which are recommended for removal, the majority are small, and their removal will have limited landscape or ecological impact.

The existing tree lines along the eastern and northern site boundaries would remain largely unaffected. Whilst there would be some loss of trees along the southern and western boundaries, woodland connectivity along the southern boundary would remain high, as a fringe of trees would be retained within the site itself, and the access road which leads to the crematorium, and which lies a short distance to the south of the site, is also well-wooded. This would retain the bat commuting route and foraging corridor, in this part of the site. Similarly, the south-western site boundary would retain a wooded fringe, and its value to foraging and commuting bats would also be maintained. The loss of trees along the central western boundary (T64-68 and T72-75) would not appreciably affect the bat foraging resource; these trees are all small, and the larger T63 to the south, and T69-71 to the north, would be retained. Very little bat foraging or commuting activity was recorded in this part of the site.

In order to accord with best practice, those trees which are scheduled for removal, and which have been identified as having potential to support roosting bats (refer to Figure 2 in this report) should be subject to a 'confirmatory' dusk or dawn bat detector survey, or to a 'climb-and-inspect' survey by, or under the direct supervision of a Natural England licensed bat ecologist, before they are felled. This relates to Trees 6 – 9 in the ecology report (trees 44; 43; 37 and 35 respectively in the arboricultural report).

4.3 Breeding Birds

The site, particularly the broad-leaved woodland to the south and west of the hotel building, and the hedgerows, shrubs and scattered trees along the borders of the site, offer suitable nesting conditions for a range of breeding birds.

The majority of this woodland is being retained, the loss of 23 of the 77 trees will only have a limited impact upon the potential nesting resource (refer to the arboricultural report (produced by Quaife Woodlands Arboricultural and Woodland Consultants, November 2014 ref AR/3254dsL1/jq) for further details.

In order to accord with best practice, it is recommended that, ideally, any vegetation should be removed outside of the main bird breeding season (which for most species extends between March and August inclusive). Should this not be feasible, then it is recommended that a check for nesting birds should be undertaken immediately prior to removal or disturbance of habitats that have potential to support nesting birds. 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.

Furthermore, it is recommended that a range of new nesting opportunities should be provided within the proposed development. This could be achieved by additional tree and scrub planting, and by the erection of a range of bird boxes, suitable for house sparrow, starling, blue tit and great tit, on trees and/ or new or existing buildings.

Bird boxes are available from specialist suppliers such as the NHBS, refer to http://www.nhbs.com/browse/subject/307/equipment.

5.0 CLOSURE

This report has been prepared by SLR Consulting Limited with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the client. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of Amberton Properties (Barnsley) Limited. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

REFERENCES & BIBLIOGRAPHY

Barnsley Biodiversity Trust, 2009. Barnsley Biodiversity Action Plan (second edition) http://www.barnsleybiodiversity.org.uk/Barnsley%20BAP%202008-12.pdf

Bat Conservation Trust (2005) *Pipistrelles. Species Information Leaflet.* http://www.envtech.co.uk/down/files/pdf/pipistrelles.pdf

Bats and Breathable Roofing Membranes http://www.batsandbrms.co.uk

JNCC (2010) *The UK Biodiversity Action Plan*. Joint Nature Conservation Committee, Peterborough, UK.

Gloucestershire Biodiversity Action Plan http://www.gloucestershirebiodiversity.net

Hundt, L. (2012) *Bat Surveys – Good Practice Guidelines*. 2nd Edition. Bat Conservation Trust, London, UK.

Mitchell-Jones, A.J. (2004) *Bat Mitigation Guidelines*. English Nature, Peterborough, UK.

Mitchell-Jones, A.J. & McLeish, A.P. [Eds.] (2004) *The Bat Workers Manual* (3rd edition). Joint Nature Conservancy Council, Peterborough, UK.

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

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.htm

Natural Environment and Rural Communities Act 2006:

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

DRAWING 1: RESULTS OF EXTENDED PHASE 1 HABITAT SURVEY



NOTES

LEGEND

- SITE BOUNDARY
- BROAD-LEAVED SEMI-NATURAL WOODLAND
- A AMENITY GRASSLAND
- DENSE SCRUB
- INTRODUCED SHRUB
- BUILDING
- HARD STANDING
- TREE
- HEDGEROW
- Line AREAS A & B, WHERE TREES WITH APPRECIABLE BAT POTENTIAL WERE SUBJECT TO INSPECTION FOLLOWED BY DUSK/DAWN SURVEY
- (1) APPROXIMATE LOCATION OF TREES SUBJECT TO INSPECTION AND DUSK/DAWN SURVEY

AMBERTON PROPERTIES (BARNSLEY) LIMITED

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ARDSLEY HOUSE HOTEL, BARNSLEY

RESULTS OF EXTENDED PHASE 1 HABITAT SURVEY

DRAWING 1

SCALE 1:700@A3

DATE NOVEMBER 2014

0514.00801.00013.5.1.1 Ext. Phase 1

DRAWING 2: RESULTS OF BAT SURVEY



NOTES

LEGEND

POTENTIAL OF BUILDING TO SUPPORT ROOSTING BATS

- CONFIRMED ROOST
- HIGH POTENTIAL
- MODERATE POTENTIAL
- LOW POTENTIAL
- NEGLIGIBLE POTENTIAL
- LOCATION OF CONFIRMED ROOST

AMBERTON PROPERTIES (BARNSLEY) LIMITED

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ARDSLEY HOUSE HOTEL, BARNSLEY

RESULTS OF BAT SURVEY

DRAWING 2

1:700@A3

NOVEMBER 2014

0154.00801.00013.2.1 Bat Survey

APPENDIX A

PROTOCOL FOR WORKING IN AREAS THAT MIGHT SUPPORT BATS

General Protocol for Demolition of Buildings

If bats are found within a site being demolished / stripped, or if further advice is needed, it is recommended that contractors contact either 'Bat Line' (0845 1300228), or SLR Consulting (0114 290 3628 / 07971462696) immediately.

In cases where specialist ecological surveys have indicated the possible presence of bats, but where bats themselves or signs of bats (such as droppings) have not been detected, it is essential that demolition is carried out in an appropriate and sensitive manner.

It should be noted that where bats roosts are found and have potential to be affected by site development, a European Protected Species License (EPSL) from Natural England is required. If this were the case, works would need to comply fully with the terms and conditions of this license and associated, legally-binding 'method statement'. Conversely, where bats are strongly suspected to be present, but where they have not been detected, further surveys may be required to confirm whether or not they do occur. If additional surveys are not carried out as recommended by good practice, any bats that are subsequently killed or injured, or roosts damaged (even following the best practice guidance contained herein) might result in an offence being committed under the relevant legislation.

The protocol below provides general guidance on how to dismantle buildings, assuming that all other issues have been adequately addressed.

Protocol to be followed during demolition

Bats are very small animals; the smallest British species weigh only a few grams and can easily fit inside a match box. Bats are able to conceal themselves in the smallest of gaps and crevices, such as beneath a boarded up window, behind a loose piece of lead flashing or under a missing section of mortar. However, most bats tend to prefer particular features, and by following the simple steps listed below, the likelihood of killing or injuring a bat can be significantly reduced. Should bats be found at any stage of demolition work must stop immediately and advice sought from 'Bat Line' (0845 1300228), which is run by the Bat Conservation Trust, , or from SLR Consulting (contact Gary Oliver on 0114 2903628 / 07971 462696)

The following steps should be taken by the demolition contractor, only after appropriate surveys have been carried out by a suitably qualified ecologist, and no bats, or evidence of occupation by bats, has been detected. Care should be taken even when buildings are considered to offer relatively low potential for bats.

Search for signs of bats prior to and during works

Certain bats tend to inhabit sealed roof voids/ loft spaces; the species most often encountered in this situation being the brown long-eared bat. Brown long-eared bats are quite often found clinging to the main ridge beam, usually at the darkest or warmest end of the roof space, and are usually comparatively easy to find. Where buildings are safe to enter, an inspection of the roof space should be carried out prior to the start of demolition or stripping works. If bats are found work should stop and advice sought immediately.

When removing roof tiles (particularly raised or slipped tiles, or ridge tiles with missing mortar), lead flashing or boards from windows, all of which provide potential crevices, look for bats and their droppings. Most bat droppings are similar in size and shape to mouse droppings, but unlike mouse droppings they crumble into a fine, dry powder when 'rolled' between the fingers.

Careful removal of materials that might support bats

Most bats found in buildings are crevice-dwelling species, the commonest of which is the Pipistrelle (there are at least three species of Pipistrelle breeding in Britain). Any material with potential to form a crevice should be removed by hand with care in such a way that it is able to be replaced if bats are found. This is particularly important when working at or near the apex of buildings, along the ridge of a building or on a south-facing side of a building (the warmest part).

Stripping of the roof, in particular, should proceed with caution, and special care should be taken when working on under-felted sections or sections containing sarking board (as they may form pockets beneath the outer tiles). Extreme care should be taken when stripping areas with missing, raised or cracked tiles.

Ridge tiles; facia boards; soffit boxes; gaps in brickwork or mortar; hanging tiles; loose or missing roof tiles; lead flashing; boards over windows; sarking boards or under-felt should be removed very carefully, and an inspection made for bats and droppings at regular intervals. If possible, particularly suitable crevices/ features should be searched using a fibrescope / endoscope or small torch and flexible mirror. All material potentially concealing a roost should be lifted vertically, without downward or side-ward pressure (as far as is practical), taking care not to crush bats should they be present, but not visible.

If bats, or signs of bats (such as droppings) are found at any stage during the demolition works, work should stop locally and advice sought immediately, either by contacting 'Bat Line' (0845 1300228) or SLR Consulting (0114 2903628 / 07971 462696).

Appropriate timing for demolition works

December, January and February should be avoided if possible, as bats may be hibernating and be particularly difficult to find. The safest working 'windows' in most cases are between mid-March and mid April, and from mid-September to mid-November. These dates are indicative only, as the 'sensitive period' may shift depending on prevailing weather conditions and location.

Appropriate use of breathable and non-breathable membranes

There is a growing body of evidence that breathable roofing membranes (BRM) can entangle, trap and ultimately kill large numbers of bats in certain situations (as described in http://www.batsandbrms.co.uk).

Therefore, in areas which are likely to support bats, or which will be made accessible to bats, **it is recommended that bitumen Type IF non-breathable membrane is used.**

Appropriate timber treatment (if relevant)

If buildings are being renovated or retained, or if new buildings are being constructed that might support bats, care should be taken not to use chemicals that might harm

bats. Further advice on suitable products is provided in Natural England Technical Information Note TIN092 ' Bat roosts and timber treatment products'.

http://publications.naturalengland.org.uk/publication/31005

What to do if bats are found

Bats are delicate and easily injured. They have also been found to carry a lyssavirus (similar to rabies); a bite from a bat in Scotland led to the death of a bat worker in 2003, and there are been subsequent cases of bats carrying this virus, throughout Britain since then. Unless equipped with thick gloves, do not attempt to handle bats under any circumstances. **Stop work immediately and call this practise or Gary Oliver (07971462696), or seek advice from 'Bat Line' (0845 1300228).**

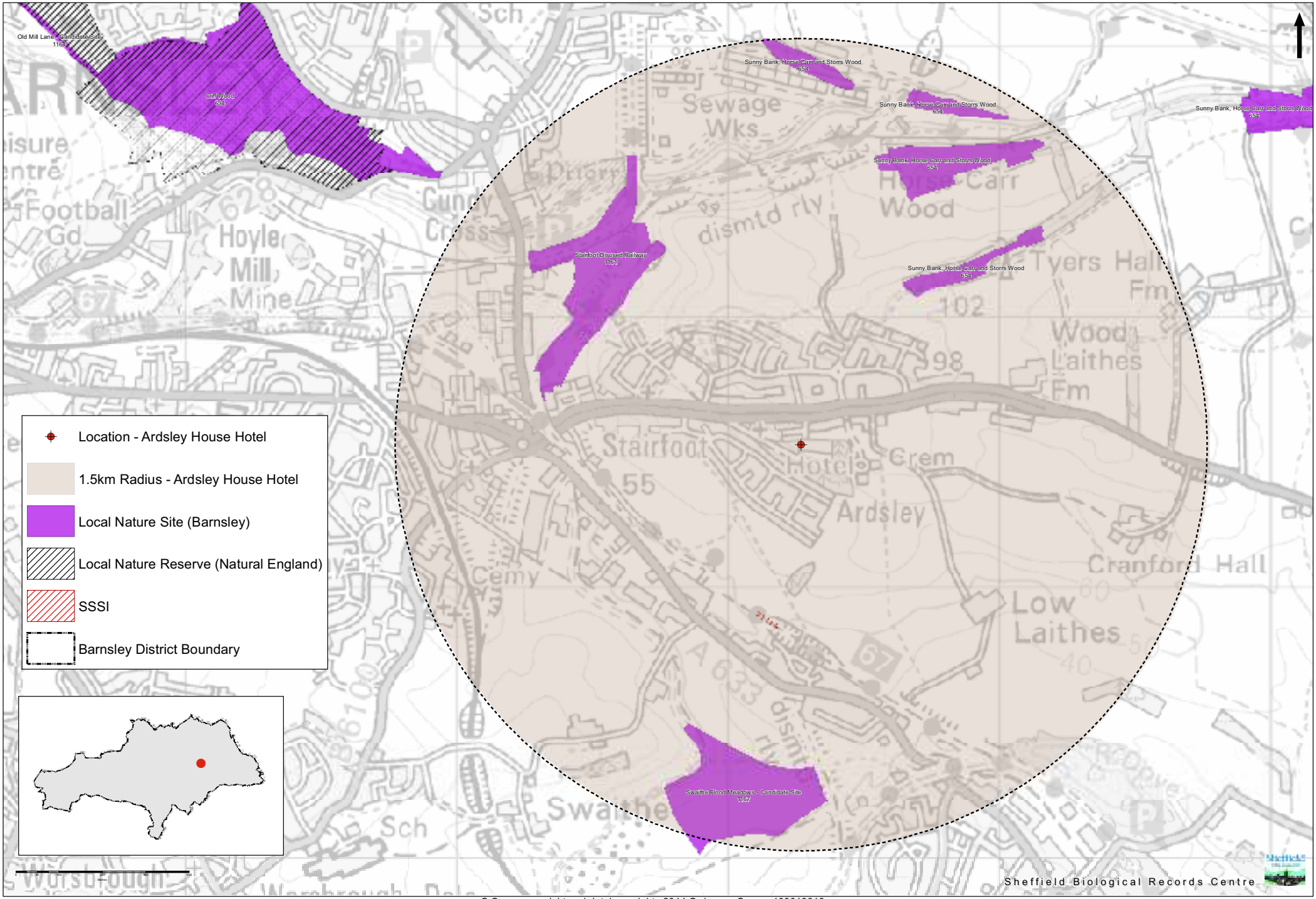
If thick gloves are available and any bats are in imminent danger of death or injury, it may be appropriate to pick up and move them to a safe place. **Handling should only be attempted by site workers who are confident in their ability to handle bats. Where handling is carried out, the site worker involved must accept the risks associated with handling a potentially dangerous species – we repeat that handling is not advised unless bats are in clear danger and appropriate equipment, care and skill is used to handle them.** If it is necessary to handle a bat, the animal should be placed in a secure, well-ventilated container and left in a cool, dark place. This might include a cupboard spare room or the boot of a car (parked in the shade); bats should not be placed in the fridge or freezer (even when it is suspected that they are dead).

APPENDIX B

DESK STUDY DATA OBTAINED FROM BARNSELY BIOLOGICAL RECORDS CENTRE

Statutory & Non Statutory Wildlife Sites - Ardsley House Hotel, Doncaster Road, Barnsley

Date - 22 Oct 2014



C Crown copyright and database rights 2014 Ordnance Survey 100018816

County: South Yorkshire **Site Name: Stairfoot Brickworks**

District: Barnsley

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981, as amended.

Local Planning Authority: Barnsley Metropolitan Borough Council

National Grid Reference: SE 381048 **Area:** 0.0994 (ha)

Ordnance Survey Sheet 1:50,000: 110 **1:10,000:** SE 30 SE, NE

Date Notified (Under 1981 Act): 5 July 1999

Other Information:
A new site. A Geological Conservation Review (GCR) site.

Description and Reasons for Notification:
Stairfoot Brickworks lies about 3 kilometres east-south-east of Barnsley.

The site contains exposures of the Aegiranum Marine Band which marks the Duckmantian-Bolsovian stage boundary of the Westphalian Series. The marine band is about 4 metres thick, and consists of black and blue-grey shales and mudstones which overlie a thin coal and seat earth. While the lower and upper parts of the marine band only contain fish fragments and *Naiadites* bivalves, the middle part of the marine band contains a fauna which includes an assemblage of ammonoids (including the index species *Donetzoceras aegiranum*, as well as numerous nautiloids, pectinoid bivalves, gastropods and crinoids.

The site provides the best available exposure of the Aegiranum Marine Band within the Pennine Basin as well as the best known exposure of the ammonoid bearing part of the marine band in the world. The site is particularly good for the study of the index species *Donetzoceras aegiranum* and numerous well-preserved adults and juveniles are preserved.

The Aegiranum Marine Band at Stairfoot Brickworks is an internationally important horizon for the stratigraphical correlation of the Westphalian Series across much of north-west Europe.

PLANNING DESIGN ENVIRONMENT



28.Stairfoot Disused Railway

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
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E: tep@tep.uk.com
W: www.tep.uk.com

Site Name:	Stairfoot Disused Railway
Site Area:	14.52ha
Survey Date:	September 2010
Nearest Settlement:	Between Stairfoot and Cundy Cross
Grid Reference at Centre:	SE37517, 06145
Surveyor(s)	PG

Site Description:

This is a complex area where the routes of former railway lines and the course of the River Dearne meet up, in an area bounded on the west by the A633 Grange Lane. The site lies within the floodplain south of the Dearne and the disused railways are marked by embankments crossing through and sub-dividing the area.

The range of habitats is diverse with south-facing slopes, shaded slopes and low areas between the railway banks supporting a range of species-rich grasslands, scrub, woodland, bracken stands, swamp and open water. Much woodland has regenerated naturally since closure of the railways and of the former coal workings. Some of the woodland is now quite mature and the mix of oak and birch forms some good examples of W16a type, the oak sub-community of oak-birch-wavy hair-grass woodland type.

This type is found over areas TN11, TN14 and TN16 but naturally regenerated scrub/woodland is also found in areas TN1, TN5, TN7, TN19, TN20 and TN21. Significant areas of scrub were noted in areas TN2, TN8, TN13 and TN18. Some of the scrub and woodland has developed over the disused railway embankments but large areas of neutral grass/herb development are also found along these features, often with much scattered scrub (TN4, TN8, TN12 and TN17).

The north-south running embankment of area TN8 has a particularly diverse mix of herb-rich swards, scrub and woodland development. Between the embankments in the eastern part of the site there are low lying areas dominated by dense growths of bracken (TN6, TN10, and TN15) whilst the lower area in the west of the site (TN9) has developed swampy vegetation around standing open water.

There has been some management of this site, with a network of surfaced footpath routes created and some planting of native tree and shrub species (notably in area TN17). However, large areas of the site have no current management and not all former footpath routes are now passable. These quieter areas remain diverse and are likely to provide a significant haven for bird, mammal and invertebrate fauna in this urban fringe location.

Important Species:

Great woodrush **(***Luzula sylvatica*), butch vetch (*Vicia sepium*) & sessile oak (*Quercus petraea*), bluebell (*Hyacinthoides non-scripta*), dog's Mercury (*Mercurialis perennis*) and wood millet (*Milium effusum*), species which are indicators of ancient woodland in South Yorkshire, were noted in the site.

UKBAP breeding bird species include linnet *(Carduelis cannabina),* reed bunting *(Emberiza schoeniclus),* dunnock *(Prunella modularis),* bullfinch *(Pyrrhula pyrrhula)* and song thrush *(Turdus philomelos).*

Target Note:	TN1
Habitat:	Semi-natural broadleaved woodland, on rail bank

Species List:

Scientific Name	Common Name	Frequency
Fraxinus excelsior	Ash	D
Crataegus monogyna	Hawthorn	F
Rubus fruticosus agg.	Bramble	F
Anthriscus sylvestris	Cow Parsley	O
Arrhenatherum elatius	False Oat-grass	O
Cirsium arvense	Creeping Thistle	O
Salix caprea	Goat Willow	O
Sambucus nigra	Elder	O
Urtica dioica	Nettle	O
Corylus avellana	Hazel	R
Elymus caninus	Bearded Couch	R
Rosa canina agg.	Dog Rose	R

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

Target Note:	TN2
Habitat:	Continuous scrub, on railway embankment

Species List:

Scientific Name	Common Name	Frequency
Crataegus monogyna	Hawthorn	D
Rubus fruticosus agg.	Bramble	F
Calystegia silvatica	Large Bindweed	O
Cirsium arvense	Creeping Thistle	O
Fraxinus excelsior	Ash	O
Prunus sp.	Cherry species	O
Rosa canina agg.	Dog Rose	O
Sambucus nigra	Elder	O
Urtica dioica	Nettle	O
Artemisia vulgaris	Mugwort	R

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

Target Note:	TN3
Habitat:	Modified neutral grassland, along former rail-bed

Species List:

Scientific Name	Common Name	Frequency
Festuca rubra	Red Fescue	A
Arrhenatherum elatius	False Oat-grass	A
Trifolium repens	White Clover	F
Dactylis glomerata	Cock's-foot	F
Lotus corniculatus	Bird's-foot Trefoil	F
Vicia sepium	**Bush Vetch**	**O**
Centaurea nigra	Knapweed	O
Trifolium pratense	Red Clover	O
Tanacetum vulgare	Tansy	O
Odontites verna	Red Bartsia	O
Plantago lanceolata	Ribwort Plantain	O
Lolium perenne	Ryegrass	O
Taraxacum officinale agg.	Dandelion	O
Vicia cracca	Tufted Vetch	O
Hypericum perforatum	Perforate St John's-wort	O
Arctium minus	Lesser Burdock	R
Artemisia absinthinum	Wormwood	R
Senecio jacobaea	Ragwort	R
Silene vulgaris	Bladder Campion	R

Trifolium medium	Zigzag Clover	R
Artemisia vulgaris	Mugwort	R
Chamerion angustifolium	Rosebay Willowherb	R
Rubus fruticosus agg.	Bramble	R
Cirsium vulgare	Spear Thistle	R
Reseda luteola	Weld	R
Plantago major	Greater Plantain	R
Heracleum sphondylium	Hogweed	R
Leontodon autumnalis	Autumn Hawkbit	R
Potentilla reptans	Creeping Cinquefoil	R
Knautia arvensis	Field Scabious	R
Melilotus altissimus	Tall Melilot	R
Medicago lupulina	Black Medick	R
Lepidium draba	Hoary Cress	R

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

Target Note:	TN4
Habitat:	Continuous scrub

Species List:

Scientific Name	Common Name	Frequency
Crataegus monogyna	Hawthorn	A
Pteridium aquilinum	Bracken	F
Rubus fruticosus agg.	Bramble	F
Fraxinus excelsior	Ash	O
Rosa canina agg.	Dog Rose	O
Sambucus nigra	Elder	O

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

Target Note:	TN5
Habitat:	Semi-natural broadleaved woodland , on rail bank

Species List:

Scientific Name	Common Name	Frequency
Crataegus monogyna	Hawthorn	D
Sambucus nigra	Elder	F
Pteridium aquilinum	Bracken	F
Betula pendula	Silver Birch	F
Chamerion angustifolium	Rosebay Willowherb	O
Alnus glutinosa	Alder	O
Salix cinerea ssp. cinerea	Grey Willow	O
Impatiens glandulifera	**Himalayan Balsam**	**O**
Acer pseudoplatanus	Sycamore	O
Quercus robur	English Oak	R

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

Target Note:	TN6
Habitat:	Continuous bracken

Species List:

Scientific Name	Common Name	Frequency
Pteridium aquilinum	Bracken	D
Holcus mollis	Creeping Soft-grass	F
Betula pendula	Silver Birch	O
Agrostis capillaris	Common Bent	O
Chamerion angustifolium	Rosebay Willowherb	O
Quercus robur	English Oak	R
Crataegus monogyna	Hawthorn	R
Lathyrus linifolius	Bitter-vetch	R
Hieracium sp.	Hawkweed species	R

Impatiens glandulifera	**Himalayan Balsam**	**R**
Cytisus scoparius	Broom	R

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

Target Note:	TN7
Habitat:	Semi-natural broadleaved woodland, on rail bank

Species List:

Scientific Name	Common Name	Frequency
Betula pendula	Silver Birch	D
Crataegus monogyna	Hawthorn	A
Rubus fruticosus agg.	Bramble	A
Pteridium aquilinum	Bracken	F
Holcus mollis	Creeping Soft-grass	F
Dactylis glomerata	Cock's-foot	O
Quercus petraea	**Sessile Oak**	**O**
Quercus robur	English Oak	O
Sambucus nigra	Elder	O
Chamerion angustifolium	Rosebay Willowherb	O
Salix caprea	Goat Willow	O
Cytisus scoparius	Broom	O
Arrhenatherum elatius	False Oat-grass	O
Hieracium sp.	Hawkweed species	R
Lathyrus linifolius	Bitter-vetch	R
Deschampsia cespitosa	Tufted Hair-grass	R

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

Target Note:	TN8
Habitat:	Modified neutral grassland, scattered scrub, continuous scrub

Species List:

Scientific Name	Common Name	Frequency
Crataegus monogyna	Hawthorn	A
Holcus lanatus	Yorkshire-fog	A
Rubus fruticosus agg.	Bramble	A
Arrhenatherum elatius	False Oat-grass	F
Dactylis glomerata	Cock's-foot	F
Festuca rubra	Red Fescue	F
Salix caprea	Goat Willow	F
Trifolium pratense	Red Clover	F
Achillea millefolium	Yarrow	O
Agrostis capillaris	Common Bent	O
Alnus glutinosa	Alder	O
Calystegia silvatica	Large Bindweed	O
Centaurea nigra	Knapweed	O
Cerastium fontanum	Common Mouse-ear	O
Chamerion angustifolium	Rosebay Willowherb	O
Cirsium arvense	Creeping Thistle	O
Cytisus scoparius	Broom	O
Equisetum arvense	Field Horsetail	O
Fraxinus excelsior	Ash	O
Heracleum sphondylium	Hogweed	O
Hypochaeris radicata	Common Cat's-ear	O
Lotus corniculatus	Bird's-foot Trefoil	O
Medicago lupulina	Black Medick	O
Odontites verna	Red Bartsia	O
Plantago lanceolata	Ribwort Plantain	O
Ranunculus repens	Creeping Buttercup	O
Rosa canina agg.	Dog Rose	O
Rumex obtusifolius	Broad-leaved Dock	O

Salix fragilis	Crack Willow	O
Tanacetum vulgare	Tansy	O
Trifolium repens	White Clover	O
Ulex europaeus	Gorse	O
Urtica dioica	Nettle	O
Angelica sylvestris	Wild Angelica	R
Anthriscus sylvestris	Cow Parsley	R
Armoracia rusticana	Horse-radish	R
Artemisia absinthinum	Wormwood	R
Artemisia vulgaris	Mugwort	R
Aster sp.	Michaelmas-daisy species	R
Conium maculatum	Hemlock	R
Corylus avellana	Hazel	R
Deschampsia cespitosa	Tufted Hair-grass	R
Digitalis purpurea	Foxglove	R
Dipsacus fullonum	Teasel	R
Dryopteris filix-mas	Male-fern	R
Elytrigia repens	Common Couch	R
Epilobium hirsutum	Great Willowherb	R
Fallopia japonica	**Japanese Knotweed**	**R**
Filipendula ulmaria	Meadowsweet	R
Galega officinalis	Goat's-rue	R
Glechoma hederacea	Ground-ivy	R
Heracleum mantegazzianum	Giant Hogweed	R
Hieracium sp.	Hawkweed species	R
Impatiens glandulifera	**Himalayan Balsam**	**R**
Lathyrus pratensis	Meadow Vetchling	R
Leucanthemum vulgare	Oxeye daisy	R
Linaria vulgaris	Common Toadflax	R
Lupinus x regalis	Lupin	R
Medicago sativa	Lucerne	R
Ononis repens	Restharrow	R
Picris hieracioides	Hawkweed Ox-tongue	R
Prunus avium	Wild Cherry	R
Pyracantha coccinea	Firethorn	R
Pyrus communis	Pear	R
Ranunculus acris	Meadow Buttercup	R
Reseda luteola	Weld	R
Rubus idaeus	Raspberry	R
Salix alba	White Willow	R
Silene dioica	Red Campion	R
Silene vulgaris	Bladder Campion	R
Solanum dulcamara	Bittersweet	R
Sorbus aucuparia	Rowan	R
Sorbus intermedia	Swedish Whitebeam	R
Spiraea sp.	Spiraea species	R
Stachys sylvatica	Hedge Woundwort	R
Symphytum x uplandicum	Russian Comfrey	R
Tragopogon pratensis	Goat's-beard	R
Trifolium medium	Zigzag Clover	R
Trisetum flavescens	Golden Oat-grass	R
Tussilago farfara	Colt's-foot	R
Veronica beccabunga	Brooklime	R
Vicia cracca	Tufted Vetch	R
Vicia hirsuta	Hairy Tare	R
Vicia sepium	**Bush Vetch**	**R**

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

Target Note:	TN9
Habitat:	Swamp, standing water

Species List:

Scientific Name	Common Name	Frequency
Lemna minor	Common Duckweed	A
Typha latifolia	Greater Reedmace	A
Agrostis stolonifera	Creeping Bent	F
Juncus effusus	Soft Rush	F
Potentilla anserina	Silverweed	F
Epilobium hirsutum	Great Willowherb	O
Equisetum fluviatile	Water Horsetail	O
Filipendula ulmaria	Meadowsweet	O
Impatiens glandulifera	**Himalayan Balsam**	**O**
Lycopus europaeus	Gypsywort	O
Ranunculus repens	Creeping Buttercup	O
Rumex conglomeratus	Clustered Dock	O
Salix cinerea ssp. cinerea	Grey Willow	O
Sparganium erectum	Branched Bur-reed	O
Angelica sylvestris	Wild Angelica	R
Deschampsia cespitosa	Tufted Hair-grass	R
Ranunculus sceleratus	Celery-leaved Buttercup	R
Scutellaria galericulata	Skullcap	R
Solanum dulcamara	Bittersweet	R
Stachys palustris	Marsh Woundwort	R

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

Target Note:	TN10
Habitat:	Continuous bracken

Species List:

Scientific Name	Common Name	Frequency
Pteridium aquilinum	Bracken	D
Holcus mollis	Creeping Soft-grass	F
Agrostis capillaris	Common Bent	O
Lathyrus linifolius	Bitter-vetch	O
Impatiens glandulifera	Himalayan Balsam	O
Tussilago farfara	Colt's-foot	R
Poa annua	Annual Meadow-grass	R
Stellaria media	Chickweed	R
Hypochaeris radicata	Common Cat's-ear	R
Rumex acetosella	Sheep's Sorrel	R
Filipendula ulmaria	Meadowsweet	R
Dactylis glomerata	Cock's-foot	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
Betula pendula	Silver Birch	D
Salix caprea	Goat Willow	D
Crataegus monogyna	Hawthorn	F
Rubus fruticosus agg.	Bramble	F
Acer pseudoplatanus	Sycamore	O
Chamerion angustifolium	Rosebay Willowherb	O
Cirsium arvense	Creeping Thistle	O
Corylus avellana	Hazel	O
Dactylis glomerata	Cock's-foot	O
Deschampsia flexuosa	Wavy Hair-grass	O
Dryopteris filix-mas	Male-fern	O
Festuca rubra	Red Fescue	O

Fraxinus excelsior	Ash	O
Holcus lanatus	Yorkshire-fog	O
Polytrichum juniperinum	Moss species	O
Quercus robur	English Oak	O
Ranunculus repens	Creeping Buttercup	O
Rosa canina agg.	Dog Rose	O
Salix cinerea ssp. cinerea	Grey Willow	O
Sambucus nigra	Elder	O
Urtica dioica	Nettle	O
Artemisia vulgaris	Mugwort	R
Centaurea nigra	Knapweed	R
Epilobium montanum	Broad-leaved Willowherb	R
Heracleum sphondylium	Hogweed	R
Hieracium sp.	Hawkweed species	R
Hypochaeris radicata	Common Cat's-ear	R
Impatiens glandulifera	**Himalayan Balsam**	**R**
Lathyrus pratensis	Meadow Vetchling	R
Linaria vulgaris	Common Toadflax	R
Lotus corniculatus	Bird's-foot Trefoil	R
Pilosella officinarum	Mouse-ear Hawkweed	R
Plantago major	Greater Plantain	R
Prunus spinosa	Blackthorn	R
Tanacetum vulgare	Tansy	R
Taraxacum officinale agg.	Dandelion	R
Trifolium pratense	Red Clover	R
Trifolium repens	White Clover	R
Ulex europaeus	Gorse	R
Viola riviniana	Wood-dog-violet	R

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

Target Note:	TN12
Habitat:	Modified neutral grassland, scattered scrub

Species List:

Scientific Name	Common Name	Frequency
Arrhenatherum elatius	False Oat-grass	D
Festuca rubra	Red Fescue	A
Achillea millefolium	Yarrow	F
Centaurea nigra	Knapweed	F
Plantago lanceolata	Ribwort Plantain	F
Trifolium repens	White Clover	F
Agrostis capillaris	Common Bent	O
Cerastium fontanum	Common Mouse-ear	O
Chamerion angustifolium	Rosebay Willowherb	O
Cirsium arvense	Creeping Thistle	O
Hypericum perforatum	Perforate St John's-wort	O
Linaria vulgaris	Common Toadflax	O
Lotus corniculatus	Bird's-foot Trefoil	O
Potentilla reptans	Creeping Cinquefoil	O
Rubus fruticosus agg.	Bramble	O
Senecio jacobaea	Ragwort	O
Tanacetum vulgare	Tansy	O
Vicia cracca	Tufted Vetch	O
Aesculus hippocastanum	Horse-chestnut	R
Artemisia absinthinum	Wormwood	R
Centaurea scabiosa	Greater Knapweed	R
Convolvulus arvensis	Field Bindweed	R
Crataegus monogyna	Hawthorn	R
Heracleum sphondylium	Hogweed	R
Trifolium medium	Zigzag Clover	R
Ulex europaeus	Gorse	R

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

Target Note:	TN13
Habitat:	Continuous scrub, modified neutral grassland

Species List:

Scientific Name	Common Name	Frequency
Arrhenatherum elatius	False Oat-grass	A
Festuca rubra	Red Fescue	A
Rubus fruticosus agg.	Bramble	A
Agrostis capillaris	Common Bent	F
Betula pendula	Silver Birch	F
Crataegus monogyna	Hawthorn	F
Dactylis glomerata	Cock's-foot	F
Salix caprea	Goat Willow	F
Centaurea nigra	Knapweed	O
Chamerion angustifolium	Rosebay Willowherb	O
Cirsium arvense	Creeping Thistle	O
Heracleum sphondylium	Hogweed	O
Linaria vulgaris	Common Toadflax	O
Phleum pratense	Timothy	O
Quercus robur	English Oak	O
Tanacetum vulgare	Tansy	O
Teucrium scorodonium	Woodsage	O
Trifolium medium	Zigzag Clover	O
Agrostis canina	Velvet Bent	R
Convolvulus arvensis	Field Bindweed	R
Fallopia japonica	**Japanese Knotweed**	**R**
Hieracium sp.	Hawkweed species	R
Hypochaeris radicata	Common Cat's-ear	R
Knautia arvensis	Field Scabious	R
Lotus corniculatus	Bird's-foot Trefoil	R
Malus domestica	Apple	R
Plantago major	Greater Plantain	R

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

Target Note:	TN14
Habitat:	Semi-natural broadleaved woodland

Species List:

Scientific Name	Common Name	Frequency
Betula pendula	Silver Birch	D
Holcus mollis	Creeping Soft-grass	A
Deschampsia flexuosa	Wavy Hair-grass	F
Pteridium aquilinum	Bracken	F
Quercus robur	English Oak	F
Digitalis purpurea	Foxglove	O
Stachys sylvatica	Hedge Woundwort	O
Cytisus scoparius	Broom	R
Heracleum sphondylium	Hogweed	R
Ilex aquifolium	Holly	R
Luzula sylvatica	**Great Woodrush**	**R**
Plantago major	Greater Plantain	R
Rosa canina agg.	Dog Rose	R
Sonchus oleraceus	Smooth Sow-thistle	R
Sorbus aucuparia	Rowan	R
Tussilago farfara	Colt's-foot	R

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

Target Note:	TN15
Habitat:	Continuous bracken

Species List:

Similar to TN6 and TN10

No species list compiled for this target note area

Target Note:	TN16
Habitat:	Semi-natural broadleaved woodland

Species List:

Scientific Name	Common Name	Frequency
Betula pendula	Silver Birch	D
Deschampsia flexuosa	Wavy Hair-grass	A
Agrostis capillaris	Common Bent	F
Quercus robur	English Oak	F
Holcus lanatus	Yorkshire-fog	O
Polytrichum juniperinum	Moss species	O
Teucrium scorodonium	Woodsage	O
Alnus glutinosa	Alder	R
Calluna vulgaris	Heather	R
Convolvulus arvensis	Field Bindweed	R
Cotoneaster sp.	Cotoneaster species	R
Crataegus monogyna	Hawthorn	R
Hieracium sp.	Hawkweed species	R
Linaria vulgaris	Common Toadflax	R
Polytrichum sp.	Moss species	R
Prunus avium	Wild Cherry	R
Rosa canina agg.	Dog Rose	R

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

Target Note:	TN17
Habitat:	Broadleaved plantation, modified neutral grassland, scattered scrub

Species List:

Scientific Name	Common Name	Frequency
Betula pendula	Silver Birch	A
Crataegus monogyna	Hawthorn	A
Alnus glutinosa	Alder	F
Arrhenatherum elatius	False Oat-grass	F
Centaurea nigra	Knapweed	F
Cornus sanguinea	Dogwood	F
Festuca rubra	Red Fescue	F
Prunus spinosa	Blackthorn	F
Quercus robur	English Oak	F
Rosa canina agg.	Dog Rose	F
Salix caprea	Goat Willow	F
Trifolium repens	White Clover	F
Achillea millefolium	Yarrow	O
Chamerion angustifolium	Rosebay Willowherb	O
Cytisus scoparius	Broom	O
Dactylis glomerata	Cock's-foot	O
Holcus lanatus	Yorkshire-fog	O
Hypericum perforatum	Perforate St John's-wort	O
Lathyrus pratensis	Meadow Vetchling	O

Lotus corniculatus	Bird's-foot Trefoil	O
Medicago lupulina	Black Medick	O
Plantago lanceolata	Ribwort Plantain	O
Tanacetum vulgare	Tansy	O
Trifolium pratense	Red Clover	O
Trisetum flavescens	Golden Oat-grass	O
Artemisia vulgaris	Mugwort	R
Carex flacca	Glaucous Sedge	R
Centaurium erythraea	Common Centaury	R
Dipsacus fullonum	Teasel	R
Hypochaeris radicata	Common Cat's-ear	R
Leontodon autumnalis	Autumn Hawkbit	R
Odontites verna	Red Bartsia	R
Picris echioides	Bristly Ox-tongue	R
Pilosella officinarum	Mouse-ear Hawkweed	R
Potentilla reptans	Creeping Cinquefoil	R
Silene vulgaris	Bladder Campion	R
Tussilago farfara	Colt's-foot	R
Vicia hirsuta	Hairy Tare	R

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

Target Note:	TN18
Habitat:	Continuous scrub

Species List:

Scientific Name	Common Name	Frequency
Crataegus monogyna	Hawthorn	D
Dryopteris filix-mas	Male-fern	O
Fraxinus excelsior	Ash	O
Hedera helix	Ivy	O
Rubus fruticosus agg.	Bramble	O
Sambucus nigra	Elder	O
Conocephalum conicum	Liverwort species	R
Corylus avellana	Hazel	R
Hyacinthoides non-scripta	**Bluebell**	**R**
Hypericum androsaemum	Tutsan	R
Ilex aquifolium	Holly	R
Mercurialis perennis	**Dog's Mercury**	**R**
Milium effusum	**Wood Millet**	**R**
Solanum dulcamara	Bittersweet	R

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

Target Note:	TN19
Habitat:	Willow dominated semi-natural broadleaved woodland

Species List:

Scientific Name	Common Name	Frequency
Salix fragilis	Crack Willow	D
Crataegus monogyna	Hawthorn	F

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

Target Note:	TN20
Habitat:	Semi-natural broadleaved woodland

Species List:

Scientific Name	Common Name	Frequency
Betula pendula	Silver Birch	A
Rubus fruticosus agg.	Bramble	A
Salix caprea	Goat Willow	A
Crataegus monogyna	Hawthorn	F
Arrhenatherum elatius	False Oat-grass	O
Brachythecium rutabulum	Moss species	O
Dactylis glomerata	Cock's-foot	O
Festuca rubra	Red Fescue	O
Galium aparine	Cleavers	O
Hedera helix	Ivy	O
Heracleum sphondylium	Hogweed	O
Holcus lanatus	Yorkshire-fog	O
Quercus robur	English Oak	O
Salix cinerea ssp. cinerea	Grey Willow	O
Urtica dioica	Nettle	O
Achillea millefolium	Yarrow	R
Agrostis capillaris	Common Bent	R
Anthriscus sylvestris	Cow Parsley	R
Centaurea nigra	Knapweed	R
Chamerion angustifolium	Rosebay Willowherb	R
Cirsium arvense	Creeping Thistle	R
Convolvulus arvensis	Field Bindweed	R
Cornus sanguinea	Dogwood	R
Dryopteris filix-mas	Male-fern	R
Epilobium montanum	Broad-leaved Willowherb	R
Fraxinus excelsior	Ash	R
Geranium molle	Dove's-foot Cranesbill	R
Geum urbanum	Wood Avens	R
Hieracium sp.	Hawkweed species	R
Ligustrum vulgare	Wild Privet	R
Lonicera periclymenum	Honeysuckle	R
Odontites verna	Red Bartsia	R
Plantago lanceolata	Ribwort Plantain	R
Plantago major	Greater Plantain	R
Prunus avium	Wild Cherry	R
Prunus spinosa	Blackthorn	R
Pteridium aquilinum	Bracken	R
Scrophularia nodosa	Common Figwort	R
Solanum dulcamara	Bittersweet	R
Sorbus aucuparia	Rowan	R
Tanacetum vulgare	Tansy	R
Taxus baccata	Yew	R
Tragopogon pratensis	Goat's-beard	R
Trifolium medium	Zigzag Clover	R
Trifolium pratense	Red Clover	R
Tussilago farfara	Colt's-foot	R

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

Target Note:	TN21
Habitat:	The River Dearne and surrounding habitats

Species List:

TN8 and TN5 represent the habitat and species present along the River Dearne. Himalayan balsam, Japanese knotweed and giant hogweed are present on the banks of the river.

No species list compiled for this target note area

Management Issues:

Once the colliery had shut down and the railway lines through the area closed there seems to have been no management input into this topographically complex site along the southern bank of the River Dearne. This lack of management led to natural regeneration of a wide range of habitats and species, many of them exotics, within this residential/industrial interface.

Natural processes continue over much of the area and habitats are changing. Without management of scrub growth, for example, current areas of quite species-rich grassland will be shaded out, but on the other hand the area of naturally regenerated woodland will therefore continue to increase.

Management has so far been concentrated along the eastern side of the site, from the north-east to the south-west, with paths laid out and mown strips maintained along appropriate stretches. Apart from this the only other management has taken place along the routes of overhead lines.

It is debateable whether management input should take place to keep areas free of scrub development, as once started this will need to be continuous. Management of some of the exotic species here, notably the invasive alien plants Himalayan balsam, giant hogweed and Japanese knotweed, may be advisable, particularly along the banks of the River Dearne.

Diversity:

At the time of survey, in 2010, this site exhibits a wide diversity of habitats and species, with 156 vascular plant species recorded overall. However, it could be seen that the natural processes of scrub and woodland development are taking place, with these habitat types increasing in area and proportion of cover.

In the short term this will lead to some diminution of plant diversity, as illustrated by the dearth of species below the dense hawthorn scrub of TN18 and the extensive goat willow dominated sections of TN20 area.

However, the site is so complex that it is most likely that there will always be a wide range of different niches available on this site for plants and other wildlife.

Naturalness:

The natural process of vegetation succession, with scrub growth invading grassland areas and subsequently developing into woodland, can readily be observed over many parts of this site. There are also examples of quite old-established semi-natural woodland (e.g. TN14) within the site boundaries. Though some of the 156 types of vascular plant noted are exotic species, the majority are locally native, so this site provides a good area to see a wide range of local plants. The River Dearne appears to run in its natural channel here and the banks are not managed, providing a natural feature along the northern site boundary

Rare or Exceptional Features:

There are no old hedgerows or ancient trees within this site, but the Dearne is of geographical and ecological value.

Fragility:

Vegetation across this site is very robust, but much of the eastern area is in a dynamic state with natural processes causing an inexorable shift from open grassland communities towards climax woodland vegetation. There is little to threaten this situation, unless large scale redevelopment is proposed.

The river may be susceptible to pollution incidents from beyond the site boundaries. The swamp and open water of TN9 area could be damaged by pollution from outside, perhaps the waste disposal recycling site immediately to its west.

Typicalness:

This range of vegetation types and species is fairly typical of unmanaged areas of post industrial, brownfield, land in this part of Yorkshire, although this site is perhaps more species diverse than most.

Recorded History & Cultural Associations:

The history of local railways is fairly well documented and it should be worthwhile to track down details of the lines that passed through this area and largely helped to create this landscape along the southern side of the River Dearne.

For example the open central area within the mature woodland of TN14 marks the former route of one of the railways before it entered the Ardsley Tunnel, heading towards the north-east. Railways locally are closely associated with coal mining, a past industry directly impacting this site and the general area around.

Connectivity within the Landscape:

A narrow lobe of agricultural land abuts the south-eastern edge of the site, extending westwards, between the River Dearne and Stairfoot, from open countryside further to the east. The river running along the northern site boundary reinforces the links with habitats beyond the immediate location, which is mainly a mix of residential, transport infrastructure, industrial and post-industrial land.

The site benefits from the diversity of these links. The largely unmanaged land south of the River Dearne provides a much greater range of structural and species-diversity than the parkland developed on the opposite northern bank. However the very existence of this more managed type increases local diversity overall.

Value for appreciation of Nature and Learning:

Access is readily gained from the public park on the northern river bank and the Trans Pennine Trail crosses the river on an old railway viaduct (part of TN3) and passes through the south-eastern side of the site. The Dearne Way runs from west to east along the northern bank of the River Dearne, making a junction with the Trans Pennine Trail.
There is also a public right of way along the southern bank of the river, north of the TN8 railway embankment, but this is overgrown and very difficult to follow. Because of its accessibility and diversity this site does has value as an example of ecological richness in the urban fringe.

Apart from signage for the Trans Pennine Trail, there is no other site interpretation apparent here. However accessibility from the north-west, via the managed parkland, is rendered doubly useful as the former monastic site, after which Monk Bretton gets its name, lies immediately at the northern edge of the park, very close to the site.

The combination of historic and ecologically rich features should make this area of great interest to local schools in the residential areas that lie to the south, west and north of the site.

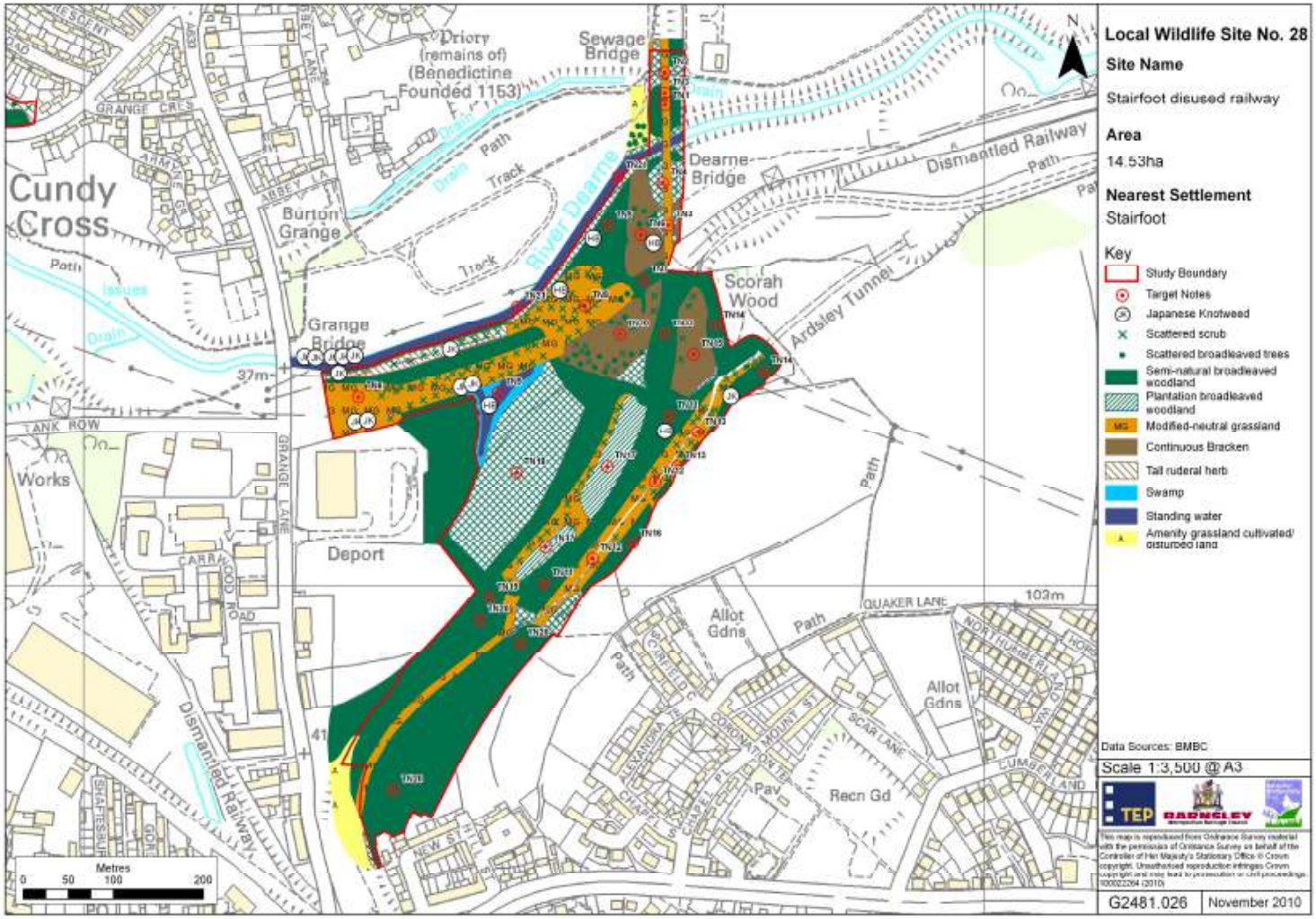
Recommendations:

This site has large number of species present, with 150+recorded during the survey. It is a well used recreation route because of the Trans-Pennine Trail and provides access to the River Dearne.

It is also part of a natural network that connects to the river and Sunny Bank, Horse Carrs and Storrs Wood and Edderthorpe Ings Local Wildlife Sites. There is potential to extend this site eastwards towards Sunny Bank and encompass the land between the River Dearne and the Trans-Pennine Trail.

Action:

Retain as a Local Wildlife Site
Extend site boundary eastwards to encompass the land south of the river


Local Wildlife Site No. 28
Site Name
Stairfoot disused railway
Area
14.53ha
Nearest Settlement
Stairfoot
Key
Study Boundary
Target Notes
Japanese Knotweed
Scattered scrub
Scattered broadleaved trees
Semi-natural broadleaved woodland
Plantation broadleaved woodland
Modified-neutral grassland
Continuous Bracken
Tall ruderal herb
Swamp
Standing water
Amenity grassland cultivated/ disturbed land
Data Sources: BMBC
Scale 1:3,500 @ A3
G2481.026
November 2010
Cundy Cross
Priory (remains of) (Benedictine Founded 1153)
Sewage Bridge
Burton Grange
River Dearne
Dearne Bridge
Dismantled Railway
Scorah Wood
Ardsley Tunnel
Grange Bridge
Deport
Works
Allot Gdns
Recn Gd
Pav
QUAKER LANE
Metres
0 50 100 200

PLANNING DESIGN ENVIRONMENT



31. Sunny Bank, Horse Carr and Storrs Wood

LWS Assessment and Phase 1 Survey

Prepared by
TEP

for

Barnsley Metropolitan Borough Council

January 2011
(Edited December 2011)

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Site Name:	Sunny Bank, Horse Carr and Storrs Wood
Site Area:	22.7ha
Survey Date:	September 2010
Nearest Settlement:	Ardsley, Cudworth and Lundwood
Grid Reference at Centre:	SE40279, 06835
Surveyor(s)	LAC, VG

Site Description:

The Sunny Bank, Horse Carr and Storrs Wood site comprises five separate areas of broadleaved semi-natural woodland which are connected through tree lined fields, tracks and disused railways. The areas of woodland lie in an agricultural landscape, close to the eastern edge of Barnsley with residential developments north, west and south of the site and industrial developments northeast of the site.

All five areas are on the register of ancient woodland sites. Sunny Bank Wood is separated by the Dearne Valley Way into two areas (TN3, TN4). The west area of Sunny Bank Wood (TN3) is dominated by English oak (*Quercus robur*) and diggings were noted in this wood which could be indicative of badger (*Meles meles*). Silver birch *(Betula pendula)* and sessile oak (*Quercus petraea*) are abundant in the east portion of Sunny Bank Wood (TN4). Bluebell (*Hyacinthoides non-scripta*) is present throughout the wood and there are three stands of Himalayan balsam *(Impatiens glandulifera).*

Horse Carr Wood is also separated into two areas of woodland. English oak is abundant in the canopy in the northern section (TN2), with sycamore (*Acer pseudoplatanus)* and silver birch *(Betula pendula)* both frequent as would be expected in a typical W16 woodland community. This wood becomes more open to the west, with sycamore occurring less frequently. As the canopy thins here, there are areas of unimproved neutral grassland where creeping soft grass *(Holcus mollis)* is abundant. The southern section of Horse Carr Wood is typical of W10 woodland community and bluebells are present throughout.

Storrs Wood (TN6) is the largest and most easterly area of the woodland blocks within the site, incorporating Hollins Wood at its western end. This is mainly of W10 type, apart from in the northeast, where W16 community prevails. The northern site boundary borders a dismantled railway and rock exposures run through the wood from west to east, along the sides of an old railway cutting. The River Dearne forms part of the northern edge of this woodland. There is a stand of Himalayan balsam along the old cutting and four more stands of Himalayan balsam in the north-eastern part of the woodland.

Important Species:

Wood millet (*Milium effusum*), yellow archangel (*Lamiastrum galeobdolon*), wood sorrel (*Oxalis acetosella*), bluebell (*Hyacinthoides non-scripta*), dog's mercury (*Mercurialis perennis*), great Wood rush (*Luzula sylvatica*) and greater stitchwort (*Stellaria holostea*) are all ancient woodland indicator species in South Yorkshire.
This site also contains Japanese knotweed (*Fallopia japonica*) as well as the Himalayan balsam

Kingfisher *(Alcedo atthis)* is a Schedule 1 species which breeds on the River

Dearne at these sites and otter *(Lutra lutra),* a UKBAP species, pass along the river exploring new territories. UKBAP breeding birds include dunnock *(Prunella modularis),* bullfinch *(Pyrrhula pyrrhula)* and song thrush *(Turdus philomelos).*

Target Note:	TN1
Habitat:	Semi-natural broadleaved woodland

Species List:

Scientific Name	Common Name	Frequency
Holcus mollis	Creeping Soft-grass	A
Pteridium aquilinum	Bracken	A
Quercus robur	English Oak	A
Rubus fruticosus agg.	Bramble	A
Acer pseudoplatanus	Sycamore	F
Betula pendula	Silver Birch	F
Deschampsia flexuosa	Wavy Hair-grass	F
Milium effusum	**Wood Millet**	**F**
Sambucus nigra	Elder	F
Chamerion angustifolium	Rosebay Willowherb	O
Crataegus monogyna	Hawthorn	O
Hyacinthoides non-scripta	**Bluebell**	**O**
Quercus petraea	**Sessile Oak**	**O**
Stachys sylvatica	Hedge Woundwort	O
Stellaria media	Chickweed	O
Urtica dioica	Nettle	O
Agrostis capillaris	Common Bent	R
Corylus avellana	Hazel	R
Dactylis glomerata	Cock's-foot	R
Digitalis purpurea	Foxglove	R
Dryopteris dilatata	Broad Buckler-fern	R
Fallopia japonica	**Japanese knotweed**	**R**
Fraxinus excelsior	Ash	R
Galeopsis tetrahit	Common Hemp-nettle	R
Luzula sylvatica	**Great Woodrush**	**R**
Oxalis acetosella	**Wood Sorrel**	**R**
Rosa canina agg.	Dog Rose	R
Salix caprea	Goat Willow	R
Sorbus aucuparia	Rowan	R
Teucrium scorodonium	Woodsage	R

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

Target Note:	TN2
Habitat:	Semi-natural broadleaved woodland

Species List:

Scientific Name	Common Name	Frequency
Quercus robur	English Oak	D
Holcus mollis	Creeping Soft-grass	A
Pteridium aquilinum	Bracken	A
Hyacinthoides non-scripta	**Bluebell**	**F**
Ilex aquifolium	Holly	F
Betula pendula	Silver Birch	O
Hedera helix	Ivy	O
Quercus petraea	**Sessile Oak**	**O**
Rubus fruticosus agg.	Bramble	O
Sambucus nigra	Elder	O
Sorbus aucuparia	Rowan	O
Urtica dioica	Nettle	O
Crataegus monogyna	Hawthorn	R

Digitalis purpurea	Foxglove	R
Sorbus intermedia	Swedish Whitebeam	R
Ulmus glabra	Wych Elm	R

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

Target Note:	TN3
Habitat:	Semi-natural broadleaved woodland – two parcels of woodland with a similar mix of species.

Species List:

Scientific Name	Common Name	Frequency
Betula pendula	Silver Birch	A
Quercus petraea	**Sessile Oak**	**A**
Deschampsia flexuosa	Wavy Hair-grass	F
Holcus mollis	Creeping Soft-grass	F
Pteridium aquilinum	Bracken	F
Quercus robur	English Oak	F
Rubus fruticosus agg.	Bramble	F
Urtica dioica	Nettle	F
Acer pseudoplatanus	Sycamore	O
Agrostis capillaris	Common Bent	O
Anthriscus sylvestris	Cow Parsley	O
Crataegus monogyna	Hawthorn	O
Digitalis purpurea	Foxglove	O
Hedera helix	Ivy	O
Heracleum sphondylium	Hogweed	O
Hyacinthoides non-scripta	**Bluebell**	**O**
Ilex aquifolium	Holly	O
Mercurialis perennis	**Dog's Mercury**	**O**
Sambucus nigra	Elder	O
Chamerion angustifolium	Rosebay Willowherb	R
Juncus effusus	Soft Rush	R
Luzula sp.	Woodrush species	R
Milium effusum	**Wood Millet**	**R**
Sorbus aucuparia	Rowan	R
Ulmus glabra	Wych Elm	R

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

Target Note:	TN4
Habitat:	Semi-natural broadleaved woodland

Species List:

Scientific Name	Common Name	Frequency
Betula pendula	Silver Birch	A
Quercus robur	English Oak	A
Agrostis capillaris	Common Bent	F
Deschampsia flexuosa	Wavy Hair-grass	F
Holcus mollis	Creeping Soft-grass	F
Pteridium aquilinum	Bracken	F
Quercus petraea	**Sessile Oak**	**F**
Rubus fruticosus agg.	Bramble	F
Crataegus monogyna	Hawthorn	O
Dryopteris dilatata	Broad Buckler-fern	O
Dryopteris filix-mas	Male-fern	O
Epilobium montanum	Broad-leaved Willowherb	O
Fraxinus excelsior	Ash	O
Galeopsis tetrahit	Common Hemp-nettle	O
Hedera helix	Ivy	O
Hyacinthoides non-scripta	**Bluebell**	**O**

Lamiastrum galeobdolon	**Yellow Archangel**	**O**
Moss sp.	Moss species	O
Polytrichum sp.	Moss species	O
Silene dioica	Red Campion	O
Stellaria holostea	**Greater Stitchwort**	**O**
Urtica dioica	Nettle	O
Arum maculatum	Lords-and-Ladies	R
Blechnum spicant	Hard Fern	R
Corylus avellana	Hazel	R
Crepis capillaris	Smooth Hawk's-beard	R
Cytisus scoparius	Broom	R
Hieracium sp.	Hawkweed species	R
Ilex aquifolium	Holly	R
Impatiens glandulifera	**Himalayan Balsam**	**R**
Milium effusum	**Wood Millet**	**R**
Phyllitis scolopendrium	Hart's-tongue	R
Populus tremula	Aspen	R
Rubus idaeus	Raspberry	R
Salix cinerea ssp. cinerea	Grey Willow	R
Sambucus nigra	Elder	R
Viburnum opulus	Guelder-rose	R
Viola riviniana	Wood-dog-violet	R

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

Management Issues:

The proximity of Sunny Bank Wood to the sewage works and residential areas has led to some incidences of fly tipping. The riverside location of Sunny Bank and Storrs Woods has led to some quite large-scale colonisation by Himalayan balsam and there is a stand of Japanese knotweed (*Fallopia japonica*) at the western end of the northern section of Horse Carr Wood (TN2).

Management of the nuisances of tipping and invasive alien species needs to be put into effect to protect these ancient woodland fragments.

Some areas have very dense canopy with little understorey or groundflora and would benefit from thinning to allow more light through.

Major Wood, between the southern part of Horse Carr Wood and Hollins Wood, is also on the register of ancient woodlands and should be included in woodland management plans for this site. Increasing the connectivity of these small woodlands would be ecologically advantageous.

Diversity:

The site is more-or-less uniformly woodland habitat and there is not much structural diversity within the stands. The course of the river and the railway cuttings do add some diversity.

During the course of 2010 fieldwork a total of 58 species was recorded, seven of which are indicative of ancient woodland habitats in South Yorkshire.

Naturalness:

Although constricted to narrow strips across an active agricultural land, these woodlands represent natural vegetation surviving from a formerly much more widespread habitat type.

Watercourses through the area generally still follow their natural routes but there has been past disturbance, as evidenced by the now disused railway routes through most of the woods.

Rare or Exceptional Features:

Surviving ancient woodland, along with possible surviving invertebrate fauna, is the most notable feature of this site.

Fragility:

This site appears to be susceptible to fly tipping where there is road access, otherwise the woodland habitat is quite robust. There is potential for damage to the site by water-borne contamination or possibly prolonged flooding of the Dearne valley.

Typicalness:

The woodland appears to be typical of surviving small areas of ancient woodland in the Barnsley area. As a designated Local Wildlife Site, it is relatively unusual in being fragmented into five separated areas.

Recorded History & Cultural Associations:

The western parts of this site lie less than 1km east of Monk Bretton Priory, established in 1154 in what was then the wooded valley of the Dearne. The monks and lay brothers would have undoubtedly exploited the woodlands for various purposes.

There appears to be little evidence of past woodland management activities remaining in these small stands, though the name Hollins Wood could derive from former usage of pollarding holly to feed to stock in winter.

There is more evidence of industrial history, with remains of former railway routes crossing through the area.

The site is now owned by Barnsley Council, after its purchase from the Talbot family in the 1930s.

Connectivity within the Landscape:

This woodland habitat is quite isolated within arable farmland, but there is some minor linkage via scattered hedgerows and the wooded banks of disused railways. The Dearne Valley is a major landscape link in the wider sense, but is no longer as wooded as in the days of the monks at Monk Bretton.

Value for appreciation of Nature and Learning:

The Dearne Way snakes through the site, following the course of the river. A close network of other public footpaths links the various elements of the site with each other (with the exception of the eastern portion of Sunny Bank Wood) and also to the local settlements of Lundwood, Cudworth and Ardsley.

There are schools in each of these areas, making these ecologically valuable ancient woodlands very accessible.

Recommendations:

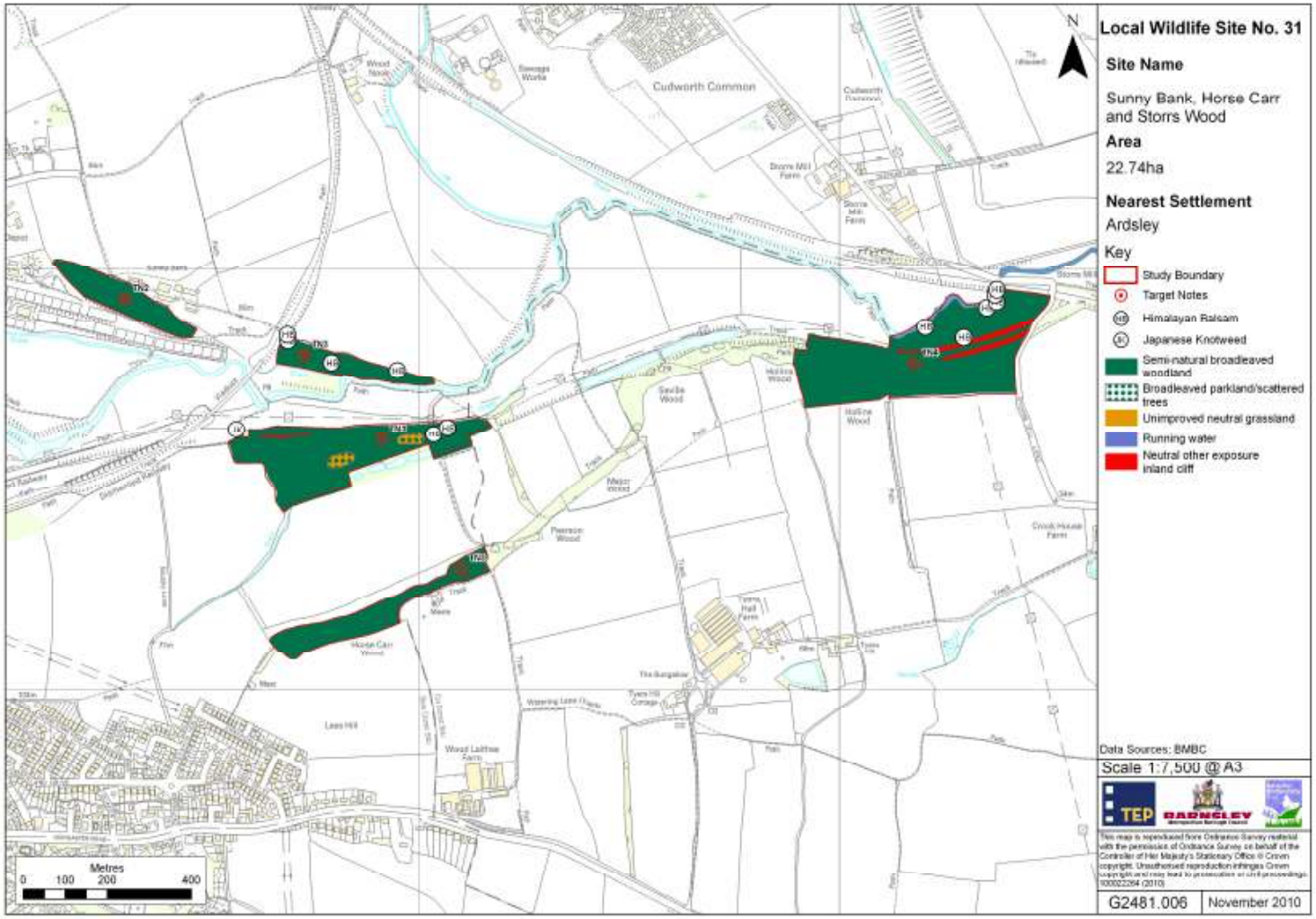
This site appears on the Natural England Ancient Woodland Inventory and seven species associated with ancient woodland were recorded during the 2010 survey. Further survey, earlier in the year, may reveal a larger number of species.
Management to diversify structure of the woodlands may improve

As part of the Ancient Woodland Inventory, this site qualifies under the site assessment criteria and should be retained as a Local Wildlife Site. Consideration should also be given to the possibility of surveying the adjoining Saville, Major and Pearson Woods and consider their inclusion as Local Wildlife Site, subject to survey and approval.

The site would benefit from improvement and diversification delivered through ecological management.

Action:

Retain as a Local Wildlife Site
Survey adjoining wooded areas



31. Sunny Bank, Horse Carr and Storrs Wood

PLANNING DESIGN ENVIRONMENT



57. Swaithe Flood Meadows

LWS Assessment and Phase 1 Survey

Prepared by
TEP

for

Barnsley Metropolitan Borough Council

January 2011
(Edited December 2011)

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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 an 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
Crataegus monogyna	Hawthorn	D
Poa trivialis	Rough Meadow-grass	O
Heracleum sphondylium	Hogweed	O
Rubus fruticosus agg.	Bramble	O
Aegopodium podagraria	Ground-elder	O
Pteridium aquilinum	Bracken	O
Stachys sylvatica	Hedge Woundwort	O
Cirsium arvense	Creeping Thistle	O
Holcus lanatus	Yorkshire-fog	O
Impatiens glandulifera	**Himalayan Balsam**	**O**
Urtica dioica	Nettle	O
Sambucus nigra	Elder	O
Alliaria petiolata	Garlic Mustard	O
Arrhenatherum elatius	False Oat-grass	O
Epilobium hirsutum	Great Willowherb	O

Elymus caninus	Bearded Couch	O
Anisanthera sterilis	Sterile Brome	O
Deschampsia cespitosa	Tufted Hair-grass	R
Lamiastrum galeobdolon	**Yellow Archangel**	**R**
Rosa canina agg.	Dog Rose	R
Salix fragilis	Crack Willow	R
Acer pseudoplatanus	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
Arrhenatherum elatius	False Oat-grass	F
Plantago major	Greater Plantain	F
Equisetum arvense	Field Horsetail	F
Epilobium hirsutum	Great Willowherb	O
Cerastium fontanum	Common Mouse-ear	O
Holcus lanatus	Yorkshire-fog	O
Arctium minus	Lesser Burdock	O
Anagallis arvensis	Scarlet Pimpernel	O
Cirsium vulgare	Spear Thistle	O
Persicaria maculosa	Redshank	O
Anisanthera sterilis	Sterile Brome	R
Dipsacus fullonum	Teasel	R
Papaver rhoeas	Common Poppy	R
Tripleurospermum inodorum	Scentless Mayweed	R
Juncus bufonius	Toad Rush	R
Stachys palustris	Marsh Woundwort	R
Sonchus asper	Prickly Sow-thistle	R
Epilobium ciliatum	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
Persicaria amphibia	Amphibious Bistort	A
Chenopodium album	Fat-hen	A
Agrostis stolonifera	Creeping Bent	A
Juncus articulatus	Jointed Rush	A
Epilobium hirsutum	Great Willowherb	F
Tricitum aestivum	Wheat	F
Equisetum arvense	Field Horsetail	F
Juncus bufonius	Toad Rush	F
Alopecurus geniculatus	Marsh Foxtail	F
Epilobium montanum	Broad-leaved Willowherb	O
Chenopodium rubrum	Red Goosefoot	O
Polygonum aviculare	Knotgrass	O
Rumex obtusifolius	Broad-leaved Dock	O
Matricaria recutita	Scented Mayweed	O
Cirsium arvense	Creeping Thistle	O
Tussilago farfara	Colt's-foot	O
Plantago major	Greater Plantain	O
Poa trivialis	Rough Meadow-grass	O
Filago vulgaris	Common Cudweed	O
Galeopsis tetrahit	Common Hemp-nettle	O
Geranium dissectum	Cut-leaved Cranesbill	R
Sonchus asper	Prickly Sow-thistle	R
Vicia tetrasperma	Smooth Tare	R

Alisma plantago-aquatilis	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:		
Tricitum aestivum	Wheat	D
Equisetum arvense	Field Horsetail	A
Poa annua	Annual Meadow-grass	F
Holcus lanatus	Yorkshire-fog	O
Agrostis stolonifera	Creeping Bent	O
Cirsium arvense	Creeping Thistle	O
Rumex obtusifolius	Broad-leaved Dock	O
Festuca rubra	Red Fescue	O
Plantago major	Greater Plantain	O
Dactylis glomerata	Cock's-foot	O
Poa trivialis	Rough Meadow-grass	O
Elytrigia repens	Common Couch	O
Arrhenatherum elatius	False Oat-grass	O
Epilobium montanum	Broad-leaved Willowherb	O
Cirsium vulgare	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
Equisetum arvense	Field Horsetail	F
Rubus fruticosus agg.	Bramble	F
Elytrigia repens	Common Couch	F
Acer pseudoplatanus	Sycamore	F
Arrhenatherum elatius	False Oat-grass	F
Alnus glutinosa	Alder	F
Urtica dioica	Nettle	F
Hedera helix	Ivy	F
Crataegus monogyna	Hawthorn	F
Impatiens glandulifera	**Himalayan Balsam**	**F**
Deschampsia flexuosa	Wavy Hair-grass	O
Holcus mollis	Creeping Soft-grass	O
Cirsium arvense	Creeping Thistle	O
Quercus petraea	**Sessile Oak**	**O**
Salix fragilis	Crack Willow	O
Epilobium hirsutum	Great Willowherb	O
Hyacinthoides non-scripta	**Bluebell**	**O**
Heracleum sphondylium	Hogweed	O
Sambucus nigra	Elder	O
Stachys sylvatica	Hedge Woundwort	O
Lapsana communis	Nipplewort	O
Fraxinus excelsior	Ash	O
Geum urbanum	Wood Avens	R
Linaria vulgaris	Common Toadflax	R
Centaurea nigra	Knapweed	R
Scrophularia auriculata	Water Betony	R
Lathyrus pratensis	Meadow Vetchling	R
Sparganium erectum	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 it 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.

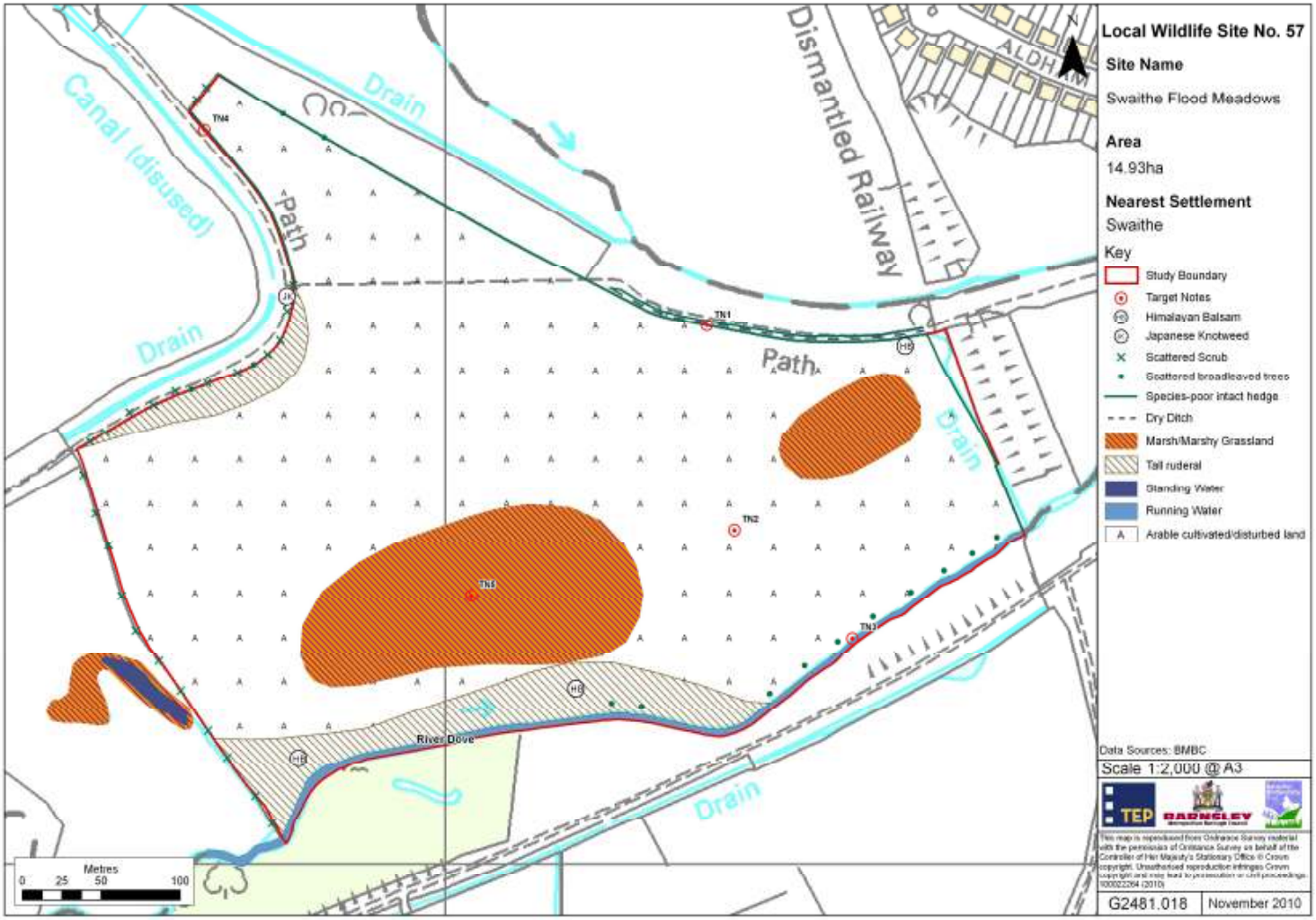
In winter, when this site is flooded, it could provide feeding and overwintering grounds for wildfowl and waders. Bird species recorded in the area show a number of nationally important species.

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


Local Wildlife Site No. 57
Site Name
Swaithe Flood Meadows
Area
14.93ha
Nearest Settlement
Swaithe
Key
Study Boundary
Target Notes
Himalayan Balsam
Japanese Knotweed
Scattered Scrub
Scattered broadleaved trees
Species-poor intact hedge
Dry Ditch
Marsh/Marshy Grassland
Tall ruderal
Standing Water
Running Water
Arable cultivated/disturbed land
Canal (disused)
Drain
Path
Dismantled Railway
River Dove
TN1
TN2
TN3
TN4
TN5
Metres
0 25 50 100
Data Sources: BMBC
Scale 1:2,000 @ A3
G2481.018
November 2010

Grid Ref	*Location*	*Date*	*Group*	*Scientific Name*	*Common Name*
SE386066	'BARNSLEY MBC'	01/03/2005 00:00	terrestrial mammal	Lutra lutra	Otter
SE38640670	Horse Carr Wood	17/03/2005 00:00	terrestrial mammal	Lutra lutra	Otter
SE373063	River Dearne at Grange Lane	25/10/2012 00:00	crustacean	Austropotamobius pallipes	Freshwater Crayfish
SE373063	River Dearne at Grange Lane	27/10/2012 00:00	crustacean	Austropotamobius pallipes	Freshwater Crayfish
SE3805	Ardsley	11/06/1990 00:00	terrestrial mammal	Nyctalus noctula	Noctule
SE386045	Ardsley	30/07/2000 00:00	terrestrial mammal	Nyctalus noctula	Noctule
SE386066	'BARNSLEY MBC'	01/03/2005 00:00	terrestrial mammal	Lutra lutra	Otter
SE3704	Swaithe, Dove Valley Worsbrough	18/05/1995 00:00	bird	Perdix perdix	Grey Partridge
SE3704	Swaithe, Dove Valley Worsbrough	26/09/1996 00:00	bird	Perdix perdix	Grey Partridge
SE3704	Swaithe, Dove Valley Worsbrough	04/09/1997 00:00	bird	Perdix perdix	Grey Partridge
SE3804	flood meadow, Swaithe, Dove Valley Wor	01/06/2003 00:00	bird	Perdix perdix	Grey Partridge
SE3704	Swaithe, Dove Valley Worsbrough	18/05/1995 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	23/06/1995 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	15/02/1996 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	02/04/1996 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	03/05/1996 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	06/06/1996 00:00	bird	Vanellus vanellus	Lapwing
SE3804	flood meadow, Swaithe, Dove Valley Wor	01/06/2003 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	21/01/1999 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	01/04/1995 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	08/07/1999 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	05/09/1999 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	26/09/1999 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	01/04/2003 00:00	bird	Vanellus vanellus	Lapwing
SE380042	flood meadow, Swaithe, Dove Valley Wor	01/07/1999 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	27/01/1995 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	30/12/1996 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	11/03/1998 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	12/06/1998 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	03/07/1998 00:00	bird	Vanellus vanellus	Lapwing
SE3704	Swaithe, Dove Valley Worsbrough	01/09/1997 00:00	bird	Streptopelia turtur	Turtle Dove
SE3704	Swaithe, Dove Valley Worsbrough	17/05/1998 00:00	bird	Streptopelia turtur	Turtle Dove

SE3704	Swaithe, Dove Valley Worsbrough	23/05/1998 00:00	bird	Streptopelia turtur	Turtle Dove
SE3704	Swaithe, Dove Valley Worsbrough	04/07/1999 00:00	bird	Streptopelia turtur	Turtle Dove
SE3704	Swaithe, Dove Valley Worsbrough	01/03/1998 00:00	bird	Streptopelia turtur	Turtle Dove
SE3704	Swaithe, Dove Valley Worsbrough	09/03/2003 00:00	bird	Emberiza citrinella	Yellowhammer
SE3704	Swaithe, Dove Valley Worsbrough	01/04/2003 00:00	bird	Emberiza citrinella	Yellowhammer
SE3704	Swaithe, Dove Valley Worsbrough	05/02/1994 00:00	bird	Emberiza citrinella	Yellowhammer
SE3704	Swaithe, Dove Valley Worsbrough	09/03/1994 00:00	bird	Emberiza citrinella	Yellowhammer
SE3704	Swaithe, Dove Valley Worsbrough	28/01/1995 00:00	bird	Emberiza citrinella	Yellowhammer
SE3704	Swaithe, Dove Valley Worsbrough	21/01/2003 00:00	bird	Emberiza schoeniclus	Reed Bunting
SE3704	Swaithe, Dove Valley Worsbrough	09/03/2003 00:00	bird	Emberiza schoeniclus	Reed Bunting
SE3704	Swaithe, Dove Valley Worsbrough	01/04/2003 00:00	bird	Emberiza schoeniclus	Reed Bunting
SE3704	Swaithe, Dove Valley Worsbrough	28/12/2003 00:00	bird	Emberiza schoeniclus	Reed Bunting
SE3704	Swaithe, Dove Valley Worsbrough	14/02/2004 00:00	bird	Emberiza schoeniclus	Reed Bunting
SE3704	Swaithe, Dove Valley Worsbrough	01/10/1995 00:00	bird	Passer montanus	Tree Sparrow
SE3704	Swaithe, Dove Valley Worsbrough	27/12/1996 00:00	bird	Passer montanus	Tree Sparrow
SE3704	Swaithe, Dove Valley Worsbrough	20/02/1997 00:00	bird	Passer montanus	Tree Sparrow
SE3704	Swaithe, Dove Valley Worsbrough	01/05/1998 00:00	bird	Passer montanus	Tree Sparrow
SE3704	Swaithe, Dove Valley Worsbrough	29/06/1998 00:00	bird	Passer montanus	Tree Sparrow
SE3704	Swaithe Hall, Dove Valley Worsbrough	06/07/1998 00:00	bird	Passer montanus	Tree Sparrow
SE3704	Swaithe, Dove Valley Worsbrough	16/11/1998 00:00	bird	Passer montanus	Tree Sparrow
SE3704	Swaithe, Dove Valley Worsbrough	09/03/1992 00:00	bird	Passer montanus	Tree Sparrow
SE3704	Swaithe, Dove Valley Worsbrough	28/01/1995 00:00	bird	Passer montanus	Tree Sparrow
SE3704	Swaithe, Dove Valley Worsbrough	16/03/1995 00:00	bird	Passer montanus	Tree Sparrow
SE3704	Swaithe, Dove Valley Worsbrough	01/03/1998 00:00	bird	Passer montanus	Tree Sparrow
SE395052	Cranford Hall	01/01/2002 00:00	bird	Passer montanus	Tree Sparrow
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Perdix perdix	Grey Partridge
SE3804	Swaithe Flood Meadow LWS	01/01/2005 00:00	bird	Perdix perdix	Grey Partridge
SE385058	'BARNSLEY MBC'	27/01/2008 00:00	bird	Passer domesticus	House Sparrow
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Passer domesticus	House Sparrow
SE3705	'BARNSLEY MBC'	01/05/2009 00:00	bird	Passer domesticus	House Sparrow
SE385041	Wombwell	27/02/2013 00:00	bird	Passer domesticus	House Sparrow
SE377058	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE372065	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow

SE368057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE369050	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE381053	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE382053	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE386058	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE377058	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE386058	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE370054	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE372065	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE383047	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE383047	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE369050	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE370054	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE381053	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE382053	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE368057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Passer domesticus	House Sparrow
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Vanellus vanellus	Lapwing
SE3705	'BARNSLEY MBC'	01/05/2009 00:00	bird	Vanellus vanellus	Lapwing
SE3804	Swaithe Flood Meadow LWS	01/01/2005 00:00	bird	Vanellus vanellus	Lapwing
SE380042	Swaithe, Dove Valley Worsbrough	27/02/2013 00:00	bird	Vanellus vanellus	Lapwing
SE3706	Stairfoot Railway LWS	01/01/2005 00:00	bird	Emberiza schoeniclus	Reed Bunting
SE3804	Swaithe Flood Meadow LWS	01/01/2005 00:00	bird	Emberiza schoeniclus	Reed Bunting
SE384041	Aldham Mill	27/02/2013 00:00	bird	Carduelis cabaret	Lesser Redpoll
SE3704	Swaithe, Dove Valley Worsbrough	05/05/1998 00:00	bird	Motacilla flava subsp. flavissi	Yellow Wagtail
SE3704	Swaithe, Dove Valley Worsbrough	11/05/1998 00:00	bird	Motacilla flava subsp. flavissi	Yellow Wagtail
SE3704	Swaithe, Dove Valley Worsbrough	02/05/1994 00:00	bird	Motacilla flava subsp. flavissi	Yellow Wagtail
SE375055	'BARNSLEY MBC'	09/06/2013 00:00	insect - butterfly	Erynnis tages	Dingy Skipper
SE376062	'BARNSLEY MBC'	09/06/2013 00:00	insect - butterfly	Erynnis tages	Dingy Skipper
SE375055	'BARNSLEY MBC'	09/06/2013 00:00	insect - butterfly	Coenonympha pamphilus	Small Heath
SE375055	'BARNSLEY MBC'	09/06/2013 00:00	insect - moth	Semiothisa clathrata	Latticed Heath
SE375055	'BARNSLEY MBC'	09/06/2013 00:00	insect - moth	Tyria jacobaeae	Cinnabar
SE3704	Swaithe, Dove Valley Worsbrough	16/10/1995 00:00	bird	Falco columbarius	Merlin
SE3704	Swaithe, Dove Valley Worsbrough	01/04/1995 00:00	bird	Alcedo atthis	Kingfisher

SE3704	Swaithe, Dove Valley Worsbrough	21/12/1996 00:00	bird	Phoenicurus ochruros	Black Redstart
SE3704	Swaithe, Dove Valley Worsbrough	22/08/1995 00:00	bird	Tringa ochropus	Green Sandpiper
SE3704	Swaithe, Dove Valley Worsbrough	24/08/1995 00:00	bird	Tringa ochropus	Green Sandpiper
SE3704	Swaithe, Dove Valley Worsbrough	06/07/1998 00:00	bird	Tringa ochropus	Green Sandpiper
SE3704	Swaithe, Dove Valley Worsbrough	28/11/1998 00:00	bird	Tringa ochropus	Green Sandpiper
SE3704	Swaithe, Dove Valley Worsbrough	09/01/1999 00:00	bird	Tringa ochropus	Green Sandpiper
SE3704	Swaithe, Dove Valley Worsbrough	28/01/1999 00:00	bird	Tringa ochropus	Green Sandpiper
SE3704	Swaithe, Dove Valley Worsbrough	20/08/1994 00:00	bird	Tringa ochropus	Green Sandpiper
SE3704	Swaithe, Dove Valley Worsbrough	22/08/1995 00:00	bird	Tringa nebularia	Greenshank
SE3704	Swaithe, Dove Valley Worsbrough	01/09/1997 00:00	bird	Tringa nebularia	Greenshank
SE3704	Swaithe, Dove Valley Worsbrough	01/05/1998 00:00	bird	Tringa nebularia	Greenshank
SE3704	Swaithe, Dove Valley Worsbrough	11/03/1998 00:00	bird	Turdus pilaris	Fieldfare
SE3704	Swaithe, Dove Valley Worsbrough	23/04/2003 00:00	bird	Turdus pilaris	Fieldfare
SE3704	Swaithe, Dove Valley Worsbrough	03/12/1991 00:00	bird	Turdus pilaris	Fieldfare
SE3704	Swaithe, Dove Valley Worsbrough	02/12/1994 00:00	bird	Turdus pilaris	Fieldfare
SE3704	Swaithe, Dove Valley Worsbrough	18/03/2004 00:00	bird	Turdus iliacus	Redwing
SE3704	Swaithe, Dove Valley Worsbrough	03/12/1991 00:00	bird	Fringilla montifringilla	Brambling
SE3804	Swaithe Flood Meadow LWS	01/01/2005 00:00	bird	Tyto alba	Barn Owl
SE384041	Aldham Mill	27/02/2013 00:00	bird	Turdus iliacus	Redwing
SE3704	Swaithe, Dove Valley Worsbrough	01/05/1998 00:00	bird	Charadrius dubius	Little Ringed Plover
SE3704	Swaithe, Dove Valley Worsbrough	29/06/1998 00:00	bird	Charadrius dubius	Little Ringed Plover
SE3704	Swaithe, Dove Valley Worsbrough	31/03/1995 00:00	bird	Charadrius dubius	Little Ringed Plover
SE378063	Ardsley	09/07/1994 00:00	terrestrial mammal	Myotis daubentoni	Daubenton's Bat
SE378063	Ardsley	11/10/1994 00:00	terrestrial mammal	Myotis daubentoni	Daubenton's Bat
SE384054	'BARNSLEY MBC'	04/05/1992 00:00	terrestrial mammal	Pipistrellus pipistrellus	Pipistrelle
SE378063	'BARNSLEY MBC'	07/07/1994 00:00	terrestrial mammal	Pipistrellus pipistrellus	Pipistrelle
SE3804	'BARNSLEY MBC'	22/09/1992 00:00	terrestrial mammal	Pipistrellus pipistrellus	Pipistrelle
SE394051	'BARNSLEY MBC'	11/11/2004 00:00	terrestrial mammal	Pipistrellus pipistrellus	Pipistrelle
SE377057	'BARNSLEY MBC'	16/06/1999 00:00	terrestrial mammal	Pipistrellus pipistrellus	Pipistrelle
SE378063	'BARNSLEY MBC'	29/09/1990 00:00	terrestrial mammal	Pipistrellus pipistrellus	Pipistrelle
SE382050	Hangmans Wood Ardsley	22/05/1992 00:00	terrestrial mammal	Pipistrellus pipistrellus	Pipistrelle
SE3805	Hangmans Wood Ardsley	11/06/1990 00:00	terrestrial mammal	Pipistrellus pipistrellus	Pipistrelle
SE3704	Swaithe, Dove Valley Worsbrough	02/03/1995 00:00	bird	Tadorna tadorna	Shelduck

SE3704	Swaithe, Dove Valley Worsbrough	01/07/1996 00:00	bird	Falco tinnunculus	Kestrel
SE375043	Swaithe Hall Farm, Dove Valley Worsbrou	12/07/1999 00:00	bird	Falco tinnunculus	Kestrel
SE3704	Swaithe, Dove Valley Worsbrough	01/07/2003 00:00	bird	Falco tinnunculus	Kestrel
SE3704	Swaithe, Dove Valley Worsbrough	09/05/1998 00:00	bird	Charadrius hiaticula	Ringed Plover
SE3704	Swaithe, Dove Valley Worsbrough	09/02/1995 00:00	bird	Pluvialis apricaria	Golden Plover
SE3704	Swaithe, Dove Valley Worsbrough	15/07/1995 00:00	bird	Gallinago gallinago	Snipe
SE3704	Swaithe, Dove Valley Worsbrough	01/06/1996 00:00	bird	Gallinago gallinago	Snipe
SE3804	flood meadow, Swaithe, Dove Valley Wor	02/03/2003 00:00	bird	Gallinago gallinago	Snipe
SE3704	Swaithe, Dove Valley Worsbrough	22/05/2003 00:00	bird	Gallinago gallinago	Snipe
SE3704	Swaithe, Dove Valley Worsbrough	30/08/2004 00:00	bird	Gallinago gallinago	Snipe
SE3704	Swaithe, Dove Valley Worsbrough	04/09/2004 00:00	bird	Gallinago gallinago	Snipe
SE3704	Swaithe, Dove Valley Worsbrough	26/02/1996 00:00	bird	Tringa totanus	Redshank
SE3704	Swaithe, Dove Valley Worsbrough	30/03/1996 00:00	bird	Tringa totanus	Redshank
SE3704	Swaithe, Dove Valley Worsbrough	15/06/1996 00:00	bird	Tringa totanus	Redshank
SE3704	Swaithe, Dove Valley Worsbrough	06/07/1996 00:00	bird	Tringa totanus	Redshank
SE3704	Swaithe, Dove Valley Worsbrough	26/06/1997 00:00	bird	Tringa totanus	Redshank
SE3704	Swaithe, Dove Valley Worsbrough	01/03/1998 00:00	bird	Tringa totanus	Redshank
SE3704	Swaithe, Dove Valley Worsbrough	01/05/1998 00:00	bird	Tringa totanus	Redshank
SE3704	Swaithe, Dove Valley Worsbrough	12/06/1998 00:00	bird	Tringa totanus	Redshank
SE3704	Swaithe, Dove Valley Worsbrough	08/07/1999 00:00	bird	Tringa totanus	Redshank
SE3704	Swaithe, Dove Valley Worsbrough	13/03/1995 00:00	bird	Tringa totanus	Redshank
SE3704	Swaithe, Dove Valley Worsbrough	01/04/1995 00:00	bird	Tringa totanus	Redshank
SE3704	Swaithe, Dove Valley Worsbrough	11/03/1998 00:00	bird	Calidris alpina	Dunlin
SE3704	Swaithe, Dove Valley Worsbrough	09/01/1996 00:00	bird	Larus argentatus	Herring Gull
SE3704	Swaithe, Dove Valley Worsbrough	16/02/1996 00:00	bird	Larus argentatus	Herring Gull
SE3704	Swaithe, Dove Valley Worsbrough	05/02/1994 00:00	bird	Larus argentatus	Herring Gull
SE3704	Swaithe, Dove Valley Worsbrough	07/03/1994 00:00	bird	Larus argentatus	Herring Gull
SE3704	Swaithe, Dove Valley Worsbrough	19/01/1995 00:00	bird	Larus argentatus	Herring Gull
SE3704	Swaithe, Dove Valley Worsbrough	01/02/1995 00:00	bird	Larus argentatus	Herring Gull
SE3704	Swaithe, Dove Valley Worsbrough	07/03/1995 00:00	bird	Larus argentatus	Herring Gull
SE3704	Swaithe, Dove Valley Worsbrough	06/08/1995 00:00	bird	Columba oenas	Stock Dove
SE3704	Swaithe, Dove Valley Worsbrough	08/09/1997 00:00	bird	Columba oenas	Stock Dove
SE3704	Swaithe, Dove Valley Worsbrough	28/10/1997 00:00	bird	Columba oenas	Stock Dove

SE3704	Swaithe, Dove Valley Worsbrough	29/06/1998 00:00	bird	Columba oenas	Stock Dove
SE3704	Swaithe, Dove Valley Worsbrough	21/07/1998 00:00	bird	Columba oenas	Stock Dove
SE3704	Swaithe, Dove Valley Worsbrough	16/11/1998 00:00	bird	Columba oenas	Stock Dove
SE3704	Swaithe, Dove Valley Worsbrough	05/02/1994 00:00	bird	Columba oenas	Stock Dove
SE3704	Swaithe, Dove Valley Worsbrough	27/09/1994 00:00	bird	Columba oenas	Stock Dove
SE3704	Swaithe, Dove Valley Worsbrough	29/04/1995 00:00	bird	Columba oenas	Stock Dove
SE3704	Swaithe, Dove Valley Worsbrough	28/07/1995 00:00	bird	Picus viridis	Green Woodpecker
SE396054	Ardsley	07/03/2012 00:00	bird	Picus viridis	Green Woodpecker
SE396054	Ardsley	07/03/2012 00:00	bird	Picus viridis	Green Woodpecker
SE3704	Swaithe, Dove Valley Worsbrough	11/03/1995 00:00	bird	Alauda arvensis	Skylark
SE380042	flood meadow, Swaithe, Dove Valley Wor	09/07/1999 00:00	bird	Hirundo rustica	Swallow
SE3704	Swaithe, Dove Valley Worsbrough	29/09/1999 00:00	bird	Delichon urbica	House Martin
SE3704	Swaithe, Dove Valley Worsbrough	29/06/1998 00:00	bird	Riparia riparia	Sand Martin
SE380042	flood meadow, Swaithe, Dove Valley Wor	04/07/1999 00:00	bird	Turdus philomelos	Song Thrush
SE383045	'BARNSLEY MBC'	27/01/2008 00:00	bird	Turdus merula	Blackbird
SE385058	'BARNSLEY MBC'	27/01/2008 00:00	bird	Turdus merula	Blackbird
SE385058	'BARNSLEY MBC'	27/01/2008 00:00	bird	Turdus merula	Blackbird
SE377058	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird
SE372065	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird
SE382059	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird
SE388057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird
SE384045	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird
SE386058	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird
SE370054	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird
SE381053	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird
SE382053	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird
SE388057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird
SE369050	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird
SE368057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird
SE383047	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird
SE383047	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird
SE383047	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird
SE384045	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Blackbird

SE3704	Swaithe, Dove Valley Worsbrough	25/09/1999 00:00	bird	Phoenicurus phoenicurus	Redstart
SE3704	Swaithe, Dove Valley Worsbrough	31/03/2003 00:00	bird	Phylloscopus trochilus	Willow Warbler
SE3704	Swaithe, Dove Valley Worsbrough	11/05/1998 00:00	bird	Motacilla flava	Yellow Wagtail
SE3704	Swaithe, Dove Valley Worsbrough	05/05/1998 00:00	bird	Motacilla flava	Yellow Wagtail
SE3704	Swaithe, Dove Valley Worsbrough	11/05/1998 00:00	bird	Motacilla flava	Yellow Wagtail
SE3704	Swaithe, Dove Valley Worsbrough	02/05/1994 00:00	bird	Motacilla flava	Yellow Wagtail
SE383045	'BARNSLEY MBC'	27/01/2008 00:00	bird	Sturnus vulgaris	Starling
SE377058	'BARNSLEY MBC'	25/01/2009 00:00	bird	Sturnus vulgaris	Starling
SE372065	'BARNSLEY MBC'	25/01/2009 00:00	bird	Sturnus vulgaris	Starling
SE383047	'BARNSLEY MBC'	25/01/2009 00:00	bird	Sturnus vulgaris	Starling
SE384045	'BARNSLEY MBC'	25/01/2009 00:00	bird	Sturnus vulgaris	Starling
SE369055	'BARNSLEY MBC'	25/01/2009 00:00	bird	Sturnus vulgaris	Starling
SE382053	'BARNSLEY MBC'	25/01/2009 00:00	bird	Sturnus vulgaris	Starling
SE368057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Sturnus vulgaris	Starling
SE3704	Swaithe, Dove Valley Worsbrough	17/08/1999 00:00	bird	Carduelis carduelis	Goldfinch
SE3704	Swaithe, Dove Valley Worsbrough	18/09/1999 00:00	bird	Carduelis carduelis	Goldfinch
SE3704	Swaithe, Dove Valley Worsbrough	16/10/1995 00:00	bird	Carduelis cannabina	Linnet
SE3704	Swaithe, Dove Valley Worsbrough	17/11/1995 00:00	bird	Carduelis cannabina	Linnet
SE3704	Swaithe, Dove Valley Worsbrough	14/12/1995 00:00	bird	Carduelis cannabina	Linnet
SE3704	Swaithe, Dove Valley Worsbrough	25/09/1999 00:00	bird	Carduelis cannabina	Linnet
SE3704	Swaithe, Dove Valley Worsbrough	16/03/1995 00:00	bird	Carduelis cannabina	Linnet
SE3704	Swaithe, Dove Valley Worsbrough	07/06/1994 00:00	bird	Miliaria calandra	Corn Bunting
SE3704	Swaithe, Dove Valley Worsbrough	10/06/1994 00:00	bird	Miliaria calandra	Corn Bunting
SE3704	Swaithe, Dove Valley Worsbrough	01/05/1996 00:00	bird	Anas crecca	Teal
SE3704	Swaithe, Dove Valley Worsbrough	09/05/1998 00:00	bird	Anas crecca	Teal
SE3704	Swaithe, Dove Valley Worsbrough	11/03/1995 00:00	bird	Anas crecca	Teal
SE3804	flood meadow, Swaithe, Dove Valley Wor	02/03/2003 00:00	bird	Lymnocryptes minimus	Jack Snipe
SE3704	Swaithe, Dove Valley Worsbrough	03/04/2003 00:00	bird	Lymnocryptes minimus	Jack Snipe
SE3704	Swaithe, Dove Valley Worsbrough	26/03/2004 00:00	bird	Anser brachyrhyncus	Pink-Footed Goose
SE3704	Swaithe, Dove Valley Worsbrough	07/03/1995 00:00	bird	Larus canus	Common Gull
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Turdus merula	Blackbird
SE3705	'BARNSLEY MBC'	01/05/2009 00:00	bird	Turdus merula	Blackbird
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Pyrrhula pyrrhula	Bullfinch

SE3705	'BARNSLEY MBC'	01/05/2009 00:00	bird	Pyrrhula pyrrhula	Bullfinch
SE3706	Stairfoot Railway LWS	01/01/2005 00:00	bird	Pyrrhula pyrrhula	Bullfinch
SE373064	Monk Bretton	21/02/2013 00:00	bird	Pyrrhula pyrrhula	Bullfinch
SE383042	Aldham Mill	27/02/2013 00:00	bird	Pyrrhula pyrrhula	Bullfinch
SE384041	Aldham Mill	27/02/2013 00:00	bird	Pyrrhula pyrrhula	Bullfinch
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Prunella modularis	Dunnock
SE3705	'BARNSLEY MBC'	01/05/2009 00:00	bird	Prunella modularis	Dunnock
SE3706	Stairfoot Railway LWS	01/01/2005 00:00	bird	Prunella modularis	Dunnock
SE370054	'BARNSLEY MBC'	25/01/2009 00:00	bird	Regulus regulus	Goldcrest
SE370054	'BARNSLEY MBC'	25/01/2009 00:00	bird	Regulus regulus	Goldcrest
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Carduelis carduelis	Goldfinch
SE3705	'BARNSLEY MBC'	01/05/2009 00:00	bird	Carduelis carduelis	Goldfinch
SE372064	Monk Bretton	21/02/2013 00:00	bird	Carduelis carduelis	Goldfinch
SE373064	Monk Bretton	21/02/2013 00:00	bird	Carduelis carduelis	Goldfinch
SE373064	Monk Bretton	04/03/2013 00:00	bird	Carduelis carduelis	Goldfinch
SE3705	'BARNSLEY MBC'	01/05/2009 00:00	bird	Picus viridis	Green Woodpecker
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Falco tinnunculus	Kestrel
SE3705	'BARNSLEY MBC'	01/05/2009 00:00	bird	Falco tinnunculus	Kestrel
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Carduelis cannabina	Linnet
SE3705	'BARNSLEY MBC'	01/05/2009 00:00	bird	Carduelis cannabina	Linnet
SE3706	Stairfoot Railway LWS	01/01/2005 00:00	bird	Carduelis cannabina	Linnet
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Turdus viscivorus	Mistle Thrush
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Alauda arvensis	Skylark
SE3705	'BARNSLEY MBC'	01/05/2009 00:00	bird	Alauda arvensis	Skylark
SE3804	Swaithe Flood Meadow LWS	01/01/2005 00:00	bird	Alauda arvensis	Skylark
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Turdus philomelos	Song Thrush
SE3705	'BARNSLEY MBC'	01/05/2009 00:00	bird	Turdus philomelos	Song Thrush
SE3706	Stairfoot Railway LWS	01/01/2005 00:00	bird	Turdus philomelos	Song Thrush
SE373064	Monk Bretton	21/02/2013 00:00	bird	Turdus philomelos	Song Thrush
SE378065	Lundwood Sewage Treatment Works	21/02/2013 00:00	bird	Turdus philomelos	Song Thrush
SE369050	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus philomelos	Song Thrush
SE388057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus philomelos	Song Thrush
SE369050	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus philomelos	Song Thrush

SE388057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus philomelos	Song Thrush
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Sturnus vulgaris	Starling
SE3705	'BARNSLEY MBC'	01/05/2009 00:00	bird	Sturnus vulgaris	Starling
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Columba oenas	Stock Dove
SE380044	Swaithe, Dove Valley Worsbrough	27/02/2013 00:00	bird	Columba oenas	Stock Dove
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Hirundo rustica	Swallow
SE379066	Lundwood Sewage Treatment Works	04/03/2013 00:00	bird	Anas crecca	Teal
SE380066	Lundwood Sewage Treatment Works	21/02/2013 00:00	bird	Anas crecca	Teal
SE382068	Lundwood Sewage Treatment Works	21/02/2013 00:00	bird	Anas crecca	Teal
SE383043	Aldham Mill	27/02/2013 00:00	bird	Parus montanus	Willow Tit
SE3704	'BARNSLEY MBC'	01/05/2009 00:00	bird	Phylloscopus trochilus	Willow Warbler
SE3705	'BARNSLEY MBC'	01/05/2009 00:00	bird	Phylloscopus trochilus	Willow Warbler
SE377058	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE370054	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE372065	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE382053	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE383047	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE384045	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE370054	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE381053	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE382053	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE381053	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE382059	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE383047	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE384045	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE377058	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE372065	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE382059	'BARNSLEY MBC'	25/01/2009 00:00	bird	Prunella modularis	Hedge Accentor
SE377058	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird
SE386058	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird
SE370054	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird
SE383047	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird
SE369050	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird

SE388057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird
SE388057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird
SE381053	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird
SE382053	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird
SE383047	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird
SE372065	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird
SE382059	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird
SE383047	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird
SE384045	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird
SE384045	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird
SE368057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Turdus merula	Common Blackbird
SE372065	'BARNSLEY MBC'	25/01/2009 00:00	bird	Sturnus vulgaris	Common Starling
SE383047	'BARNSLEY MBC'	25/01/2009 00:00	bird	Sturnus vulgaris	Common Starling
SE384045	'BARNSLEY MBC'	25/01/2009 00:00	bird	Sturnus vulgaris	Common Starling
SE368057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Sturnus vulgaris	Common Starling
SE369055	'BARNSLEY MBC'	25/01/2009 00:00	bird	Sturnus vulgaris	Common Starling
SE382053	'BARNSLEY MBC'	25/01/2009 00:00	bird	Sturnus vulgaris	Common Starling
SE377058	'BARNSLEY MBC'	25/01/2009 00:00	bird	Sturnus vulgaris	Common Starling
SE384045	'BARNSLEY MBC'	25/01/2009 00:00	bird	Carduelis carduelis	European Goldfinch
SE368057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Carduelis carduelis	European Goldfinch
SE388057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Carduelis carduelis	European Goldfinch
SE384045	'BARNSLEY MBC'	25/01/2009 00:00	bird	Carduelis carduelis	European Goldfinch
SE388057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Carduelis carduelis	European Goldfinch
SE368057	'BARNSLEY MBC'	25/01/2009 00:00	bird	Carduelis carduelis	European Goldfinch
SE370054	'BARNSLEY MBC'	25/01/2009 00:00	bird	Pyrrhula pyrrhula	Common Bullfinch
SE382059	'BARNSLEY MBC'	25/01/2009 00:00	bird	Pyrrhula pyrrhula	Common Bullfinch
SE382059	'BARNSLEY MBC'	25/01/2009 00:00	bird	Pyrrhula pyrrhula	Common Bullfinch
SE370054	'BARNSLEY MBC'	25/01/2009 00:00	bird	Pyrrhula pyrrhula	Common Bullfinch
SE388067	'BARNSLEY MBC'	01/04/1981 00:00	terrestrial mammal	Meles meles	Badger
SE383042	Aldham Mill	27/02/2013 00:00	terrestrial mammal	Meles meles	Badger
SE386062	Horse Carr Wood	15/03/2013 00:00	terrestrial mammal	Meles meles	Badger
SE378063	Ardsley	29/09/1990 00:00	terrestrial mammal	Chiroptera	Bats
SE378063	Ardsley	29/09/1992 00:00	terrestrial mammal	Chiroptera	Bats

SE3806	'BARNSLEY MBC'	12/04/1981 00:00	terrestrial mammal	Meles meles	Badger
SE383042	River Dove	21/03/2012 00:00	terrestrial mammal	Meles meles	Badger
SE385045	Ardsley	07/07/2004 00:00	terrestrial mammal	Pipistrellus pipistrellus 45kHz	45 Khz Pipistrelle
SE388048	Ardsley	14/06/2004 00:00	terrestrial mammal	Pipistrellus pipistrellus 45kHz	45 Khz Pipistrelle
SE394051	Ardsley	11/11/2004 00:00	terrestrial mammal	Pipistrellus pipistrellus 45kHz	45 Khz Pipistrelle
SE376045	'BARNSLEY MBC'	04/08/2010 00:00	terrestrial mammal	Pipistrellus pipistrellus 45kHz	45 Khz Pipistrelle
SE384054	'BARNSLEY MBC'	17/07/2000 00:00	terrestrial mammal	Pipistrellus pipistrellus 45kHz	45 Khz Pipistrelle
SE388048	'BARNSLEY MBC'	14/06/2004 00:00	terrestrial mammal	Pipistrellus pipistrellus 45kHz	45 Khz Pipistrelle
SE378063	Ardsley	01/10/1989 00:00	terrestrial mammal	Myotis nattereri	Natterer's Bat