



global environmental solutions

Land off Lingards Lane, Slaithwaite

Extended Phase 1 Habitat Survey

SLR Ref: 424.04328.00004

August 2015

PORTMAN LAND LIMITED

Version: Rev 1

CONTENTS

1.0 INTRODUCTION.....	2
1.1 Terms of Reference	2
1.2 Site Context.....	2
2.0 RELEVANT LEGISLATION & POLICY	3
2.1 Legislation.....	3
2.2 Policy.....	4
3.0 METHODOLOGY	5
3.1 Desk Study	5
3.2 Extended Phase 1 Habitat Survey	5
3.3 External Building Inspections for Bat Roost Potential.....	5
3.4 Tree Inspections for bat Roost Potential	6
3.5 Limitations	8
4.0 RESULTS	9
4.1 Desk Study	9
4.2 Field Survey	11
4.3 Protected Species.....	23
5.0 DISCUSSION AND RECOMMENDATIONS	27
5.1 Habitats	27
5.2 Reptiles and Amphibians	27
5.3 Bats.....	27
5.4 Birds	28
6.0 CLOSURE.....	29
REFERENCES & BIBLIOGRAPHY	30

DRAWING 1 - RESULTS OF EXTENDED PHASE 1 HABITAT SURVEY

APPENDIX A – TARGET NOTES

APPENDIX B – BOTANICAL SPECIES LIST

APPENDIX C – RESULTS OF HABITAT SUITABILITY INDEX (HSI) ASSESSMENT

APPENDIX D - RESULTS OF DESK STUDY

1.0 INTRODUCTION

1.1 Terms of Reference

SLR Consulting Limited was commissioned by Portman Land Limited to undertake an Extended Phase 1 Habitat Survey of an area of land off Lingards Road, Slaithwaite, West Yorkshire (approximate central OS grid reference SE 0731 1338), in order to inform a planning application for a circa 30 property residential development. The initial survey work was undertaken in November 2014, and submitted to Kirklees Council, for comment. A request was subsequently received from Mr Jeff Keenlyside, Environment Officer (Biodiversity) to undertake a more detailed botanical survey, and a breeding bird survey, during May. This work was subsequently undertaken, and has been reported here. This has allowed us to identify those areas of species-rich grassland, which will either be retained, or recreated, within the site layout.

1.2 Site Context

The c2.7 hectare site comprises five horse-grazed fields, largely divided by dry-stone walls, a series of garages, and an access track leading off Lingards Road. The site is situated on the western fringes of Slaithwaite; it is bordered to the north by the A62, to the east and south by Lingards Road and associated residential properties, and to the west by livestock-grazed fields. The River Colne runs approximately 150m to the north of the site, and is separated from the site by the A62. The wider landscape comprises broad-leaved woodland and farmland.

The site supports predominantly poor semi-improved grassland, and this is noticeably acidic in character along very narrow field boundaries; the most species-rich field boundary runs along the northern side of Lingards Road (i.e. along the southern site boundary), where the more species-rich grassland forms a margin circa 4 metre wide on average. Two more extensive patches of species-rich acid grassland occur in the western part of the site (as further described later in this report). The two western-most fields also support areas of marshy grassland, although this is species-poor, and not of high intrinsic ecological value.

The majority of the field boundaries are formed by dry-stone walls, which have partially collapsed in places, forming rubble piles. A small spring runs across the centre of the site, flowing north-eastwards, and is joined by an underground spring from the south. The eastern end of the site comprises two rows of garages, a horse shelter, the western end of a row of terraced residential properties, and an access track leading off Lingards Road.

2.0 RELEVANT LEGISLATION & POLICY¹

2.1 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);
- 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 Please note that this legal information is a summary and intended for general guidance only. The original legal documents should be consulted for definitive information. Web addresses providing access to the full text of these documents are given in the References & Bibliography section.

2.2 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.

The Kirklees Biodiversity Action Plan (BAP) <http://www.kirklees.gov.uk/you-kmc/deliveringServices/otherPolicies.aspx> has identified a range of priority habitats and species, for which individual action plans have been developed. Priority habitats include wet/rush pasture, rough grassland, and scrub; and priority species include brown long-eared bat *Plecotus auritus*, noctule *Nyctalus noctula*, soprano pipistrelle *Pipistrellus pygmaeus*, common lizard *Lacerta vivipara*, grass snake *Natrix natrix*, slow-worm *Anguis fragilis*, adder *Vipera berus*, great crested newt *Triturus cristatus*, common toad *Bufo bufo*, and a range of farmland and upland birds.

3.0 METHODOLOGY

3.1 Desk Study

Relevant ecological records (statutory and non-statutory protected areas and protected or otherwise notable species) were obtained from West Yorkshire Ecology, for the site and 2 km radius.

3.2 Extended Phase 1 Habitat Survey

The initial Extended Phase 1 Habitat survey and mapping exercise was carried out on 24 November 2014 by two experienced ecologists with SLR Consulting, using the standard Phase 1 Habitat assessment methodology, as recommended by Natural England (JNCC, 2010). This involved a systematic site walkover to classify and map all of the habitats on site. Target notes were used to record habitats and features of particular interest, and are contained within Appendix A of this report. A plan showing the habitat types within the site boundary is provided as Drawing 1, within this report.

In addition to general habitat classification, a botanical species list was also compiled², with the abundance of each species being estimated using standard 'DAFOR' codes: **D**ominant, **A**bundant, **F**requent, **O**ccasional, **R**are (**L**ocally is used as a prefix where appropriate). A complete botanical list is provided within Appendix B of this report.

During the habitat survey, particular emphasis was placed on searching for habitats and features capable of supporting protected and notable wildlife species. This included searching for evidence of, and habitat suitability for, reptiles, amphibians, bats, riparian mammals, badger and breeding birds. In addition searches were undertaken for invasive species, including those listed on Schedule 9 of the Wildlife and Countryside Act 1981.

3.3 Update to Extended Phase 1 Habitat Survey

In order to gain further information on the character of some of the grasslands within the site and to also make further observations of the use of the site by birds, particularly breeding birds, another visit was made by an experienced SLR ecologist on 26 May 2015.

3.4 External Building Inspections for Bat Roost Potential

Thirteen small garages (B1-B3) and one horse shelter (B4), all situated at the eastern end of the site, were assessed for their potential to support roosting bats on 24 November 2014, by an experienced surveyor with SLR Consulting. The terraced row (B5) was not assessed as it lies outside of the proposed development footprint, and will therefore not be affected by the proposed development, even though it lies within the application site. Buildings B1-B4 were inspected externally, and where possible internally, to search for evidence of bats, and for potential bat access/ egress points. The buildings were graded according to their bat roost potential, using the criteria detailed in Table 1.

² Botanical nomenclature follows Stace (1997).

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 value	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. 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.

3.5 Tree Inspections for bat Roost Potential

Mature/ semi-mature trees within the site were assessed from the ground in order to gauge their potential to support roosting bats, on 24 November 2014, following criteria contained within the second edition of the Bat Conservation Trust's Good Practice Guidelines (Hundt, 2012). A torch and binoculars were used to aid inspection where possible. The criteria used for the assessment of trees are provided in Table 2.

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.
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.

3.6 Limitations

3.6.1 Desk Study

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.

3.6.2 Field Survey

Lack of evidence of a protected species at the time of survey does not necessarily preclude them from being present intermittently, or at a later date.

It was not possible to gain access into a thin strip of land (containing scrub) between residential properties in the central northern section of the site. However, this is not considered to be a significant constraint to survey, as the area could be inspected from the boundary using a pair of binoculars.

4.0 RESULTS

4.1 Desk Study

A complete account of the desk study information received from West Yorkshire Ecology from within a 2 km radius of the site is contained in Appendix D of this report. A summary of this information is provided below.

4.1.1 Statutory Sites

No statutory sites lie within a 2km boundary of the site. The South Pennine Moors, which is designated as a Site of Special Scientific Interest (SSSI), a Special Area of Conservation (SAC), and a Special Protection Area (SPA); is located 2.3km to the west of the site. The South Pennine Moors contains blanket bog, wet and dry heaths, and acid grasslands; and supports breeding populations of merlin *Falco columbarius*, short-eared owl *Asio flammeus*, and golden plover *Pluvialis apricaria*, and an 'assemblage' of other upland birds, including twite *Cardeulis flavirostris*.

4.1.2 Non-Statutory Sites

Two Sites of Scientific Interest (SSIs) are present within a 2km radius of the site: Drop Clough SSI is located approximately 1.9km away, and is designated for its wet/ upland woodland and moorland habitat; Huddersfield Narrow Canal SSI runs approximately 0.15 km north of the site and is designated for its range of aquatic and emergent plant communities.

Clough House Lane Pond Site of Wildlife Significance (SWS) is located approximately 1.1 km north-west of the site; however detailed ecological information for this pond has not been provided by West Yorkshire Ecology. SWS sites are designated for their local or district wide importance for the enjoyment, study or conservation of wildlife, geological features and landforms.

4.1.3 Protected and Other Notable Species

A total of 409 species records were returned by West Yorkshire Ecology. Of these, eight relate to amphibians, 92 to terrestrial mammals, 44 to invertebrates, 55 to plants, one to fish, and 209 to birds.

Reptiles and Amphibians

No records were provided for reptiles within the search area.

Eight amphibian records were provided, dating from between 1999 and 2005; three relating to common toad *Bufo bufo*, three to common frog *Rana temporaria* and two to smooth newt *Triturus vulgaris*. Records related to the Huddersfield Narrow Canal and River Calder, situated approximately 0.15km north of the site, or to ponds between 0.5km and 1.5km away from the site. No great crested newt *Triturus cristatus* records were returned for the 2km search radius.

Riparian Mammals

Eighteen records of water vole *Arvicola amphibius* were returned, dating from 1999. Records are centred on the River Calder and Huddersfield Narrow Canal, which run approximately 0.15km north of the site, parallel to the northern border. Records also relate to Slaithwaite Reservoir, approximately 0.5km north of the site.

No records for otter *Lutra lutra* were returned.

Birds

A total of 209 records were provided for birds, relating to 69 Birds of Conservation Concern (BoCC), and 75 species in total. The largest proportion of records relate to skylark *Alauda arvensis* (20 records were returned dating from between 1988 and 2012, the most recent records are located 1.5km south of the site), lapwing *Vanellus vanellus*, (18 records dating between 1988 and 2012, the majority of recent records located approximately 1.7km south of the site), twite *Carduelis flavirostris* (nine records dating between 1988 and 2012, with a peak count of 33 individuals in 2012 approximately 1.7km south of the site) and wheatear *Oenanthe oenanthe* (six records dating between 1988 and 2012), again, 1.7km south of the site. The vast majority of the records described above related to Deer Hill Reservoir.

Four records relate to golden plover *Pluvialis apricaria*, dating from 1988 and 2012, located adjacent to Deer Hill and Blackmoorfoot Reservoirs, the closest record being 1.8km south-east of the site. Records relating to two raptor species were returned, namely kestrel *Falco tinnunculus* (the most recent record occurred 1.8km east of the site, dating from 2012) and merlin *Falco columbarius* (the most recent record is located 1.7km south of the site, dating from 2012).

A proportion of the records provided by West Yorkshire Ecology relate to water birds and waders, which are mostly centred on and around Deer Hill Reservoir, located 1.7km to the south of the site, and Blackmoorfoot Reservoir, located approximately 2km east of the site.

Other records of note include kingfisher *Alcedo atthis* (mostly relating to the River Calder), short-eared owl *Asio flammeus* (the closest and most recent record dating from 1999 at Slaithwaite Reservoir, 0.5km north of the site), curlew *Numenius arquata* (all records are within the Red Hill Reservoir area, approximately 1.7km south of the site) and snow bunting *Plectrophenax nivalis*.

Bats

A total of 59 records were provided for bats, dating between 1999 and 2012, for the following species: Daubenton's bat *Myotis daubentonii* (two records), whiskered bat *Myotis mystacinus* (two records), Natterer's bat *Myotis nattereri* (three records), Leisler's bat *Nyctalus leisleri* (three records), noctule *Nyctalus noctula* (three records), brown long-eared bat *Plecotus auritus* (six records), common pipistrelle *Pipistrellus pipistrellus* (eight records) and soprano pipistrelle *Pipistrellus pygmaeus* (four records). Twenty-seven records were not specified to species level. The majority of the records relate to foraging bats, or are unspecified, however 16 of these relate to roosts. The most significant of these is a pipistrelle sp. roost of 150 individuals, located 1.1km north-east of the site, dating from 2006.

A roost of 45 individuals (species not specified) was provided 1.7km north-west of the site in 2014. The remaining records largely relate to properties in Slaithwaite town, to the east of the site, and the woodland belt along the River Calder, to the north of the site.

Other taxa

Five records of white-clawed crayfish *Austropotamobius pallipes* were returned from the River Calder, between 0.2 km and 0.7 km north and north-east of the site, dating from between 1970 and 2007.

No records for badger *Meles meles* were returned.

Of the remaining records, one relates to brown trout *Salmo trutta*, 55 relate to plants (mostly invasive species), 39 relate to invertebrates (mostly beetles), eight relate to brown hare *Lepus europaeus*, one to hedgehog *Erinaceus europaeus*, one to weasel *Mustela nivalis* and three relate to American mink *Neovision vison*.

4.2 Field Survey

4.2.1 Overview

The habitat types present on the site are illustrated in Drawing 1, with Target Notes identifying specific features given in Appendix A.

The site contained five grazing fields, which supported predominantly poor semi-improved grassland, with some areas of marshy grassland in the two fields forming the western section of the site. Grassland along the field borders generally had higher species diversity, and were acidic in character. The fields were largely divided by dry-stone walls, which had partially collapsed along the western boundary, resulting in piles of rubble. The site sloped downward from south to north. A small fast-flowing spring ran across the site, flowing in a north-easterly direction, and this was joined by an underground spring from the south. Various buildings were present in the eastern section of the site: two separate rows of garages (B1-B3), a horse shelter (B4), and the western end of a terraced row of residential properties (B5) which would not be affected by the development proposals.

4.2.2 Habitats

Poor Semi-Improved Grassland

The vast majority of the site comprised poor semi-improved grassland (Plate 1), with the three easternmost fields currently grazed and fertilised by horses. Patches of grassland within the two westernmost fields contained a more moss-rich and slightly more acidic sward (Target Notes 8 and 9) around areas of species-poor rush-dominated marshy grassland, which appeared to be both horse and cattle-grazed although no livestock was present at the time of the visits. Poaching was noted to be locally extensive in some of the fields.

The Western section

Of the two fields within the western part of the site, the southernmost field contained a sward mostly dominated by sweet vernal-grass *Anthoxanthum odoratum* and Yorkshire fog *Holcus lanatus* along with perennial rye-grass *Lolium perenne* and red fescue *Festuca rubra* with occasional white clover *Trifolium repens*, meadow buttercup *Ranunculus acris*, common cat's-ear *Hypochaeris radicata*, daisy *Bellis perennis* and ribwort plantain *Plantago lanceolata*. Further downslope the sward was a little more finer-leaved and more mossy-rich where springy turf moss *Rhytidiadelphus squarrosus* was the main component along with frequent red fescue common bent *Agrostis capillaris* and field wood-rush *Luzula campestris* and occasional to locally frequent pignut *Conopodium majas*. In these downslope parts the grassland also supported locally frequent heath bedstraw *Galium saxatile* indicative of a slightly more acidic turf (Target Note 9). The approximate area of the more species-rich acidic grassland denoted by Target Note 9 was 0.01 hectares.

The northernmost field, within the western part of the site, was similar in character and also contained more extensive herb and mossy-rich patches of grassland containing locally frequent pignut, common cat's-ear, fieldwood-rush and red clover *Trifolium pratense* (Target Note 8). The approximate area of the more species-rich acid grassland denoted by Target Note 8 was 0.05 hectares. Some of this sward appeared to be well-grazed and short greatly restricting the flowering of herbs. Lusher areas near to the marshy grassland were dominated by creeping buttercup *Ranunculus repens*.

Eastern section

In the eastern section of three grazing fields the sward height was on average less than 5cm in central areas, and higher along the borders where less intensive grazing had occurred. In general, the sward in the largest of the fields was a mix of several grass species but perennial ryegrass *Lolium perenne* was abundant in most parts; also present was frequent smooth-stalked meadow-grass *Poa pratensis*, annual meadow-grass *Poa annua*, common bent, Yorkshire fog *Holcus lanatus* and there was some occasional cock's-foot *Dactylis glomerata*. The central areas of the fields contained only a low diversity of largely common agricultural herbs, namely frequent white clover, ribwort plantain, dandelion *Taraxacum officinale* agg. and creeping buttercup; and there was also occasional broad-leaved dock *Rumex obtusifolius*, common mouse-ear *Cerastium fontanum* and wavy bittercress *Cardamine flexuosa*.



Plate 1: Horse-grazed poor semi-improved grassland. Photograph taken in the south-west corner of the largest field in the centre of the site, looking north-east.

The southern boundary of the site, along the border of the large field, was steep and rocky in places, and less intensively grazed by horses (Target Note 1, in Drawing 1). In this area, and along the borders of the field in the western section of the site, the grassland was more herb-rich, containing species such as red clover fox-glove *Digitalis purpurea*, meadow buttercup, orange hawkweed *Pilosella aurantiaca* and common bird's-foot-trefoil *Lotus corniculatus*. These areas of grassland also contained grasses and herbs associated with acid grassland, including occasional wavy hair-grass *Deschampsia flexuosa*, occasional mat-grass *Nardus stricta*, frequent sheep's sorrel *Rumex acetosella*, occasional heath bedstraw, and rare bilberry *Vaccinium myrtillus* along with frequent mosses, such as common feather-moss *Kindbergia praelonga*, *Hypnum cupressiforme* and *Brachythecium rutabulum*.

The circa 4 metre wide strip of more species rich neutral grassland denoted by Target Note 1 had an approximate area of 0.08 hectares.



Plate 2: Photograph (looking south) of the southern border of the largest field on the site, where the grassland had a higher species diversity, including some acidic species (Target Note 1, in Drawing 1). The topography is steep and uneven, and the ground is rocky.

Marshy Grassland

The two fields in the western section of the site were waterlogged in places, and contained areas of species-poor marshy grassland (Plate 3). These grassland patches were dominated by soft rush *Juncus effusus*, and also contained abundant creeping buttercup, frequent wavy bitter-cress, locally frequent bog stitchwort *Stellaria uliginosa*, common sorrel *Rumex acetosa* and Yorkshire fog.

The two western-most fields containing the marshy grassland were divided by dry-stone walls. The majority of the wall on the western boundary had crumbled, leaving a series of stone piles (Target Note 4, in Drawing 1). A ground-water storage area, covered in corrugated metal sheeting, was present in the field in the south-west corner of the site (Target Note 3, in Drawing 1), which was enclosed by a dry-stone wall.



Plate 3: *Photograph of the field in the south-west corner of the site, showing areas of species-poor marshy grassland dominated by smooth rush. Photograph taken from the southern boundary of the field, looking north.*

Amenity Grassland

Amenity grassland was restricted to the rear gardens of residential properties, along the northern border of the site. In the north-west corner of the site, the rear gardens of six properties on the A62 (Manchester Road) had encroached on the border of the field over time (Plate 4). The amenity grassland in this area was mown, or grazed by chickens, and was species-poor, containing perennial ryegrass, Yorkshire fog, white clover and dandelion. The rear gardens in the north-west corner of the site also contained small levels of introduced shrub such as Rhododendron, and raised vegetable plots. Two further small areas of amenity grassland were present on the site, in the north-east corner, and also comprised gardens associated with residential properties.



Plate 4: A series of rear gardens in the north-west corner of the site, containing predominantly amenity grassland. Photograph taken looking north-west.

Scrub

An area of dense scrub occurred in the north-east corner of the site, where the site joins with the A62 (Manchester Road) to the north (Plate 5). The scrub contained abundant bramble *Rubus fruticosus* agg., which reached a height of up to 2 metres. Interspersed amongst the bramble was extensive nettle *Urtica dioica* and rosebay willow-herb *Chamerion angustifolium*; and occasional young trees of ash *Fraxinus excelsior*, wild cherry *Prunus avium* and willow *Salix* sp. The scrub in this area extended to the row of garages off Manchester Road, and a gap in the scrub was present where a public footpath runs off Manchester Road to the track leading off Lingards Road (which borders the site to the south).

A stand of dense scrub was also present in the field in the north-eastern corner of the site, which contained abundant bramble and currant *Ribes* sp. A small strip of scrub was also present between two rows of residential properties along the northern border of the site (close to Building B2). This area could not be surveyed in detail due to a lack of access.

Scattered scrub was present along field boundaries, particularly along the southern site boundary, and the north-western boundary. Scrub in these areas consisted of hawthorn *Crataegus monogyna*, bramble, rowan *Sorbus aucuparia*, holly *Ilex aquifolium*, dog rose *Rosa canina*, hedge bindweed *Calystegia sepium*, nettle and blackthorn *Prunus spinosa*.



Plate 5: Scrub in the north-east corner of the site. Photograph taken from the track leading off Lingards Road, looking north-east.

Trees and Hedgerow

The site lacked extensive stretches of hedgerow, and mature trees were sparse. A short tree-line was present in the north-east corner of the site, dividing the track leading off Lingards Road from the field to the south, which comprised four mature sycamores *Acer pseudoplatanus* and an ash (Plate 6).

Two semi-mature pedunculate oaks *Quercus robur* were present within the dry-stone wall enclosed water storage area in the field in the south-west corner of the site (Target Note 3). Two sycamores and a pedunculate oak were also present in residential gardens in the north-west corner of the site.

Hedgerows on the site were restricted to very short sections, and did not contain a rich diversity of native shrubs.

H1: Hedgerow 1 was an overgrown privet hedge, with occasional willow; it was approximately 4 metres in height and 15 metres in length, and ran along the back (west) of the row of garages on Lingards Road.

H2: Hedgerow 2 was a 4 metre tall by 18 metre long dense conifer hedge forming the southern boundaries of the rear gardens associated with a row of terraced houses off Lingards Road.

H3: Hedgerow 3 was a very short section of 1.5 metre high privet hedgerow on the western side of the footpath adjoining Manchester Road.

H4: Hedgerow 4 was a dense beech *Fagus sylvatica* hedgerow, approximately 2 metres high by 8 metres long, located in the garden of a residential property off Manchester Road.

H5: Hedgerow 5 was a 2 metre high by 6 metre long privet hedgerow in the rear garden of a residential property off Manchester Road, in the north-west corner of the site.



Plate 6: A line of semi-mature/ mature sycamores and ash, situated close to the north-east corner of the site. Photograph taken looking north-west.

Running Water and Standing Water

A fast-flowing spring was present in the centre of the site, running from south-west to north-east (Plate 6; Target Note 5, in Drawing 1). The spring ran above ground for approximately 75 metres before returning below-ground. The stream was very shallow and narrow in nature, and did not exceed 5cm in depth and 30cm in width along its length. The banks of the spring were steep in places and rocky, varying in height from approximately 0.5 metres to 1 metre. The spring had a silted and pebbly bed.

The banks were vegetated by soft rush, wavy bitter-cress, fox-glove, bramble, floating sweet-grass *Glyceria fluitans* and ferns. Small amounts of common duckweed *Lemna minor* was present in the spring.

An underwater spring was present in the field to the south of the main spring (Target Note 2, in Drawing 1), which flowed northwards and fed into the main spring.



Plate 7: Shallow spring flowing across the central section of the site (Target Note 5, in Drawing 1). Photograph taken close to where the spring emerges above-ground, looking north-east.

A duck pond was present immediately to the north of the site boundary, in the rear garden of a residential property (Plate 8).

Three further ponds are present within a 500m radius of the site. However, two of these (situated approximately 470 metres east of the site, and 350 metres south-east of the site), are separated from the site by two roads, and therefore, should great crested newts be present within these water bodies, no dispersal of great crested newts from these ponds on to the site is likely to occur. The third pond, located approximately 500m west of the site, could not be accessed for an HSI assessment as it was on private land, but its distance from the site also suggests that, should great crested newt be present within this pond, they would not occur within the application site itself.



Plate 8: Duck pond, located immediately to the north of the site boundary, in the rear garden of a residential property on Manchester Road (Target Note 7, in Drawing 1). Photograph taken looking north.

Buildings and Hard Standing

A total of fifteen buildings are present on the site, and all are located within the north-east corner. Two rows of garages are present; the first of these (B1) consists of six small concrete garages with corrugated sheet roofs, which adjoin Lingards Road. The second row (B2) consists of six wooden garages with corrugated sheet roofs, located off the A62 (Manchester Road). A further small wooden garage (B3) and an open-sided corrugated metal horse shelter (B4) are also present. A row of two-storey stone terraced houses extends into the site boundary (B5), however, these residential properties do not fall within the development footprint, and therefore have not been subject to a building inspection for bats.

4.2.3 Buildings Inspections for Bat Roost Potential

Buildings B1-B4 were assessed for their potential to support roosting bats; the results are summarised in Table 3. Building B5 was not assessed, as it will not be affected by the development.

Table 3: Results of Buildings Inspections for Bat Roost Potential

B1	Description: Row of six concrete garages with flat corrugated sheet roofs, each measuring approximately 3m x 2m x 6m. Potential Bat Features: No obvious features with potential to support roosting bats. Bat Evidence: None Bat Potential: Negligible
B2	Description: Row of six wooden garages with corrugated sheeting or asphalt-covered roofs, each measuring approximately 3m x 2m x 6m Potential Bat Features: No obvious features with potential to support roosting bats. Bat Evidence: None Bat Potential: Negligible

B3	Description: Wooden garage with corrugated sheet roof, measuring approximately 3m x 2m x 6m. Potential Bat Features: No obvious features with potential to support roosting bats. Bat Evidence: None Bat Potential: Negligible
B4	Description: Open-sided corrugated metal horse shelter. Potential Bat Features: No obvious features with potential to support roosting bats. Bat Evidence: None Bat Potential: Negligible

4.2.4 Tree Inspection for Bats

All trees situated within the site were assessed for their potential to support roosting bats. No trees on the site had features with obvious bat potential, and therefore were graded as having negligible (i.e. Grade 3) potential to support roosting bats.

4.3 Protected Species

No evidence of protected species was detected during the survey.

4.3.1 Reptiles

The majority of the site was considered sub-optimal for reptiles, due to the grass being heavily grazed, and therefore providing no or very little cover. However, several rubble piles, which have been created as a result of the crumbling and derelict dry-stone walls, were present on the site which, superficially at least, provide potential refugia for reptiles (Plate 9; Target Notes 4 and 6, in Drawing 1). A compost heap was also present, adjacent to the horse shelter (B4), which contained suitable habitat for reptiles, should they be present in the local area.

Grass snake *Natrix natrix* prefer lush lowland wetland habitats, and are rare in open upland habitats (Whiteley, 1997); it is considered unlikely that grass snake will occur on the site. It is possible, although unlikely, that common lizard *Zootoca vivipara* may occur on the site, at very low densities; perhaps associated with the drystone walls and rubble piles.

The data search results show that no records exist for reptiles within a 2km radius of the site.



Plate 9: *The largest of several stone piles present within the site (Target Note 6, in Drawing 1). Photograph taken looking north on to the northern boundary of the site.*

4.3.2 Amphibians

No ponds were present on the site. The small fast-flowing spring located within the site was judged unsuitable for great crested newt.

A pond (Plate 8; Target Note 7, in Drawing 1) was located immediately to the north of the site. The pond was subject to a Habitat Suitability Index (HSI) assessment to determine its suitability for great crested newt (Oldham *et al.*, 2000). The pond was assessed as having poor suitability (refer to Appendix C for the results of the HSI Assessment) due to the presence of domesticated ducks, the lack of aquatic vegetation and low water quality.

Three further water bodies were present within a 500m radius of the site; however, two of these (located 470 metres to the east, and 350 metres to the south-east of the site) were separated from the site by two roads, which provide significant barriers to dispersal. Therefore, if great crested newt were to occur within these water bodies, it is considered unlikely that dispersal on to the site would occur. A pond, located approximately 500 metres to the west of the site boundary, in the garden of a residential property off Manchester Road, could not be HSI assessed as it was on private land. The distance of the pond from the site (500 metres) is on the very edge of the range of which great crested newts are known to disperse from breeding ponds. In addition, the area is acidic, which is not favourable for

great crested newts, and acts to further reduce the likelihood of great crested newt occurring within the area.

The majority of the site contained sub-optimal terrestrial habitat for amphibians, given that the grassland was largely short due to grazing, and extensive areas of tall and tussocky grassland were absent. Several stone piles were present within the site (Target Notes 4 and 6, in Drawing 1) which had the potential to provide refugia for amphibians. Damper areas within the marshy grassland in the western section of the site had superficial potential to support small numbers of common frog and common toad.

No records for great crested newt were returned within a 2km radius of the site.

4.3.3 Riparian Mammals

No field signs of water vole *Arvicola amphibious* or otter *Lutra lutra* were found during the survey. The small spring running through the centre of the site was considered to be unsuitable for water vole, due to its shallow fast-flowing character, its rocky banks, and its isolated nature. The data search returned records for water vole from River Calder to the north of the site, however this is divided from the site by the A62 (Manchester Road).

The spring is also considered unsuitable for otter, as it is isolated and does not provide foraging opportunities. The River Colne, situated approximately 150 metres to the north of the site, offers a higher quality habitat for riparian mammals, but this was also separated from the site by the A62. No records for otter were returned from the data search.

4.3.4 White-Clawed Crayfish

The small spring running across the centre of the site had a silted and pebbly bed, with a distinct lack of larger stones or boulders, and therefore was considered unsuitable for white-clawed crayfish *Austropotamobius pallipes*. White-clawed crayfish have been recorded in the River Calder and Huddersfield Narrow Canal to the north of the site. However no connectivity exists between this habitat and the site.

4.3.5 Badger

No badger setts or field signs of badger were found within the site or the immediate vicinity. The ground was waterlogged in areas, and very rocky; habitat within the site was considered sub-optimal for badger. No records of badger were returned from the data search.

4.3.6 Bats

The site did not contain potential roosting sites for bats; the garages and horse shelter in the eastern section of the site, and all mature/ semi-mature trees on the site, were assessed as having negligible potential (i.e. Category 3) to support roosting bats.

The site contained foraging opportunities for bats, in terms of the areas of marshy grassland and the spring. However, the majority of the site lacked significant linear features, such as tree-lines or hedgerows, to act as commuting corridors for bats, and to link up foraging areas with the surrounding landscape. The surrounding wider landscape was found to provide

higher quality habitat for commuting, foraging and roosting bats, than the site itself. This is particularly the case for the River Colne and broad-leaved woodland located to the north of the site.

4.3.7 Birds

A small number of common 'garden' birds were noted during the November 2014 survey visit, including three Birds of Conservation Concern (BOCC) namely house sparrow *Passer domesticus*, starling *Sturnus vulgaris* and black-headed gull *Chroicocephalus ridibundus* (flyover). Robin *Erithacus rubecula*, woodpigeon *Columba palumbus*, carrion crow *Corvus corone*, blackbird *Turdus merula* and wren *Troglodytes troglodytes* were also recorded on the site. During the May 2015 visit several house martins *Delichon urbica* were noted flying over the site with some landing on exposed bare ground (created by poaching) to collect wet mud to construct their nests. Apart from a wren in song no evidence of breeding territories was noted on the site during this later visit. No evidence of ground-nesting species, such as lapwing *Vanellus vanellus*; skylark *Alauda arvensis*; or meadow pipit *Anthus pratensis*, were noted within the site, or in adjacent fields.

The site has potential to support a range breeding birds in the areas of scrub in the eastern section of the site, and the scattered mature/ semi-mature trees within the site, mainly of common passerine species.

5.0 DISCUSSION AND RECOMMENDATIONS

5.1 Habitats

The majority of the site consisted of horse-grazed, poor semi-improved grassland, of low intrinsic nature conservation value. The western section of the site was water-logged in areas, and contained some extensive patches of species-poor marshy grassland of low intrinsic value, as well as two patches of species-rich acidic grassland (Target Notes 8 and 9). A circa 4 metre wide strip of species-rich acid grassland also runs along the northern side of Lingards Road (Target Note 1). The combined area of this, more species-rich acid grassland is 0.14 hectares (Target Note 1 = 0.08 ha; Target Note 8 = 0.05 hectares and Target Note 9 = 0.01 hectares). This more species-rich grassland will either be retained, or an equivalent or greater area (i.e. 0.14 hectares or more) of species-rich grassland will be recreated, through sensitive long-term management. Appropriate management would involve infrequent cutting, and removal of all arisings,

A small spring ran along the centre of the site; it was very shallow and pebbly in nature, and had no potential to support white-clawed crayfish, water vole or otter. Areas of scrub, mostly contained within the eastern section of the site, short sections of hedgerow, and scattered trees within the site provided suitable habitat for breeding birds. The marshy grassland and spring provided foraging habitat for bats. No invasive species were identified on the site.

5.2 Reptiles and Amphibians

The majority of the site is unsuitable for reptiles. However, rock piles, and a compost heap within the site provided potential refugia. The marshy grassland in the western half of the site provided, superficially at least, a small area of suitable habitat for both reptiles and amphibians.

As a precaution, it is recommended that a sensitive working protocol should be followed:

- Before clearance works, any areas of long grassland to be affected by the development works should be mown to discourage any potential reptiles away from the area. The area should be mown from the centre of the site outwards, to encourage the movement of any potential reptiles in the area to suitable habitat off-site.
- Immediately prior to the removal of drystone walls, a fingertip search should be carried out by an ecologist to search for the presence of reptiles.
- Before the removal of stone piles and the compost heap (Drawing 1, Target Notes 3 and 6), which act as potential refugia, the piles should be searched carefully for the presence of reptiles and amphibians, by an ecologist.

5.3 Bats

The buildings and trees within the site were judged to be unsuitable for roosting bats. The marshy grassland and spring provided some foraging opportunities for bats, however, due to a lack of linear features such as tree-lines and substantial lengths of hedgerow within the

site, the habitat was not connected to suitable surrounding habitat with commuting corridors. Furthermore, the site was enveloped between the busy street-light lined A62 (Manchester Road) to the north, and Lingards Road to the south, resulting in partial fragmentation of the site.

The River Colne and surrounding broad-leaved woodland to the north of the site, on the far side of the A62 from the site, was judged to offer high quality habitat for a range of bat species. Bat foraging activity is likely to be restricted largely to this area. Thus, overall the site is considered to be of low importance to bats, and it is anticipated that the development will not affect the conservation status of the local bat population.

5.4 Birds

The site was not found to support any ground-nesting birds, such as lapwing, skylark or meadow pipit, during surveys undertaken at the optimal time of year. However, scrub particularly the scrub in the eastern section of the site, and the scattered trees and short sections of hedgerow across the site, was judged to offer suitable nesting opportunities for a range of birds. It is therefore recommended that as much of this habitat is retained as possible. Where this is not possible, 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.

In order to enhance the site for nesting birds, a number of wooden or woodcrete nest boxes, suitable for starling, blue tit and great tit, could be fitted to external walls, or trees.

These features are available from specialist suppliers such as the NHBS, refer to <http://www.nhbs.com/browse/subject/426/bird-boxes>.

6.0 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 Portman Land 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

- Anon (1995) *The UK Biodiversity Action Plan*. Joint Nature Conservation Committee, Peterborough.
- Anon (2002) *Badgers and Development*. English Nature, Peterborough.
- Anon (2003) *Guidelines for Baseline Ecological Assessment*. Institute of Environmental Assessment. Chapman & Hall.
- Anon (2004) *Reptiles: Guidelines for Developers*. English Nature, Peterborough.
- Foster, J. (2001) *Great Crested Newt Mitigation Guidelines*. English Nature, Peterborough.
- Gent, T. & Gibson, S. (1998) *Herpetofauna Workers Manual*. Joint Nature Conservation Committee, Peterborough.
- Hundt, L. (2012) *Bat Surveys: Good Practice Guidelines, 2nd edition*, Bat Conservation Trust.
- Joint Nature Conservation Committee (JNCC) (2010) *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit* (Revised reprint). Joint Nature Conservancy Council, Peterborough.
- Kirklees Biodiversity Action Plan <http://www.kirklees.gov.uk/you-mkc/deliveringServices/otherPolicies.aspx>
- Mitchell-Jones, A.J. (2004) *Bat Mitigation Guidelines*. English Nature, Peterborough.
- Mitchell-Jones, A.J. & McLeish, A.P. [Eds.] (2004) *The Bat Workers Manual* (3rd edition). Joint Nature Conservancy Council, Peterborough.
- Oldham, R.S., Keeble, J., Swan, M.J.S., and Jeffcote, M. (2000) Evaluating the Suitability of Habitat for the Great Crested Newt (*Triturus cristatus*). *Herpetological Journal* 10: 143-155.
- Stace, C. (1997) *New Flora of the British Isles* (2nd edition). Cambridge University Press, Cambridge.
- Strachan, R. (1998) *Water Vole Conservation Handbook*. Wildlife Conservation Research Unit, Oxford.
- Whiteley, D. (1997) *Reptiles and Amphibians of the Sheffield Area and North Derbyshire*. Sorby Natural History Society and Sheffield City Museum, Sheffield.

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

Habitats Directive:

www.europa.eu.int/eur-lex/en/lif/dat/1992/en_392L0043

Birds Directive:

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

Wildlife and Countryside Act 1981:

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

Countryside and Rights of Way Act 2000:

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

Natural Environment and Rural Communities Act 2006:

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

Protection of Badgers Act 1992:

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

National Parks and Access to the Countryside Act 1949:

http://www.opsi.gov.uk/RevisedStatutes/Acts/ukpga/1949/cukpga_19490097_en_1

National Planning Policy Framework 2012

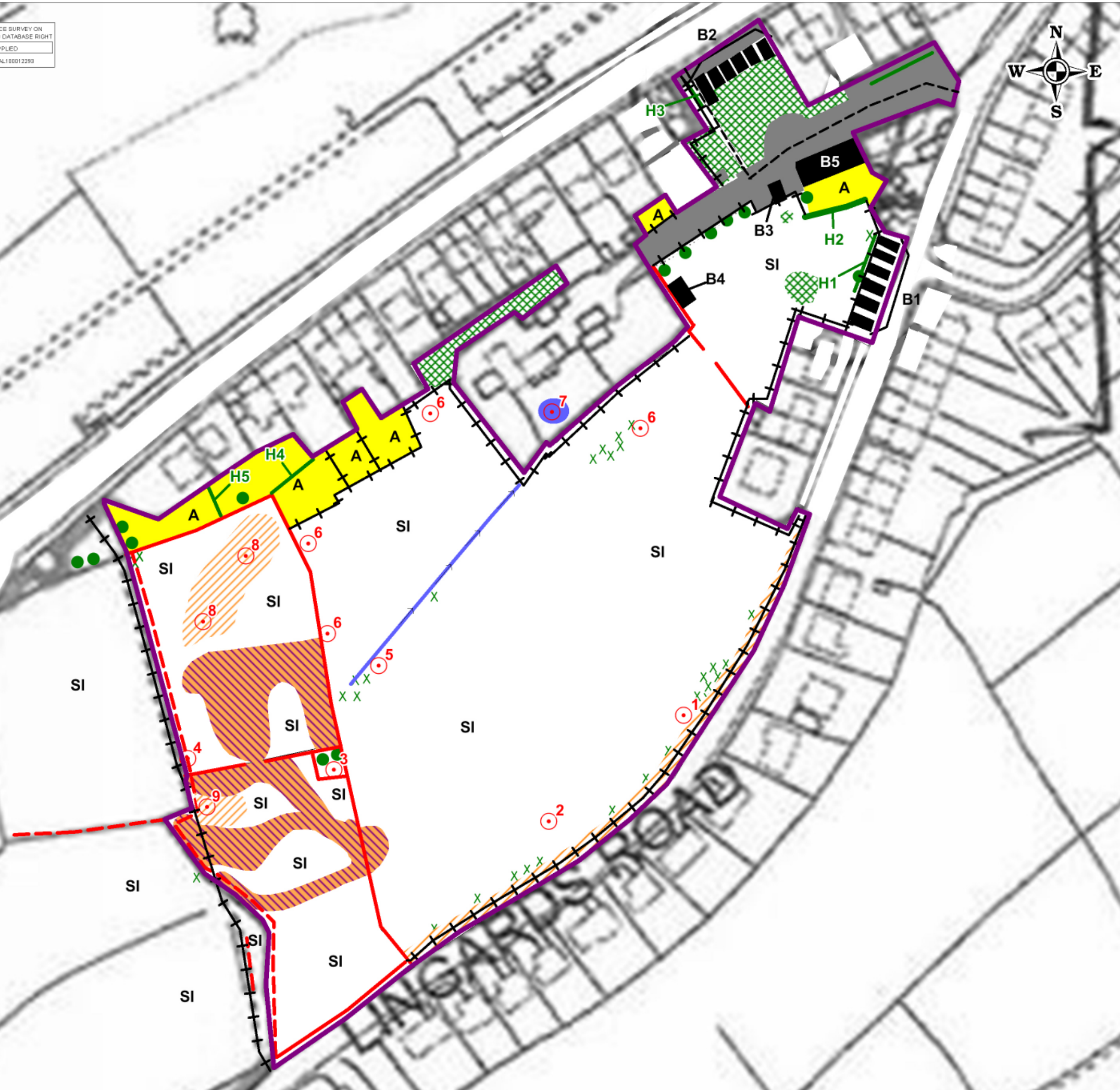
www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

DRAWING 1 – RESULTS OF EXTENDED PHASE 1 HABITAT SURVEY



LEGEND

- SITE BOUNDARY
- SI POOR SEMI-IMPROVED GRASSLAND
- SPECIES-RICH ACID GRASSLAND
- MARSHY GRASSLAND
- A AMENITY GRASSLAND
- DENSE SCRUB
- X SCATTERED SCRUB
- TREE
- HEDGEROW
- SPRING
- POND
- HARD STANDING
- BUILDING
- WALL
- DERELICT WALL
- FENCE
- FOOTPATH
- 1 TARGET NOTE



PORTMAN LAND LIMITED



UNIT 2
NEWTON BUSINESS CENTRE
NEWTON CHAMBERS ROAD
CHAPELTOWN
SHEFFIELD S35 2PW
T: 0114 245 5153
www.slrconsulting.com

LINGARDS ROAD,
SLAITHWAITE

RESULTS OF
EXTENDED PHASE 1
HABITAT SURVEY

DRAWING 1

SCALE

1:1,000@A3

DATE

AUGUST 2015

APPENDIX A – TARGET NOTES

Number	Note
1	Location of steep and somewhat rocky margins of the field, where a circa 4 metres wide grassland margin had higher species diversity, and contained species characteristic of acid grasslands. Approximate area of this more species-rich acid grassland was 0.08 hectares.
2	Location of an underground spring which flowed northwards and joined the main spring.
3	Location of underground water storage, covered in corrugated sheeting, and enclosed by a dry-stone wall.
4	The dry-stone wall along the western site boundary was crumbling and derelict, creating stone piles in places.
5	Shallow fast-flowing spring, flowing north-eastwards
6	Locations of piles of stones.
7	Location of duck pond located just beyond the northern site boundary, which was assessed as having poor suitability for great crested newt.
8	Location of the presence of pignut-moss-rich grassland swards also featuring frequent to abundant field wood-rush and range of herbs including red clover, ribwort plantain and common cat's-ear. Approximate area of this more species-rich grassland was 0.05 hectares
9	Location of patches of poor quality acidic grassland featuring locally frequent heath bedstraw along with field wood-rush within a fine sward of red fescue, sweet vernal-grass and common bent along with a locally high cover of mosses mostly of <i>Rhytidiadelphus squarrosus</i> . Approximate area of this more species-rich grassland was 0.01 hectare.

APPENDIX B – BOTANICAL SPECIES LIST

Common Name	Latin Name	Frequency (DAFOR)
Ash	<i>Fraxinus excelsior</i>	O
Annual meadow-grass	<i>Poa annua</i>	LF
Bank haircap moss	<i>Polytrichum formosum</i>	O
Bilberry	<i>Vaccinium myrtillus</i>	R
Blackthorn	<i>Prunus spinosa</i>	O
Bog stitchwort	<i>Stellaria uliginosa</i>	LF
Bramble	<i>Rubus fruticosus</i> agg.	LA
Bristly haircap	<i>Polytrichum piliferum</i>	R
Broad buckler fern	<i>Dryopteris dilatata</i>	O
Broad-leaved dock	<i>Rumex obtusifolius</i>	LF
Cock's-foot	<i>Dactylis glomerata</i>	LF
Common bent	<i>Agrostis capillaris</i>	LF
Common bird's-foot trefoil	<i>Lotus corniculatus</i>	O
Common cat's-ear	<i>Hypochaeris radicata</i>	O
Common couch	<i>Elytrigia repens</i>	O
Common duckweed	<i>Lemna minor</i>	O
Common feathermoss	<i>Kindbergia praelonga</i>	LF
Common figwort	<i>Scrophularia nodosa</i>	R
Common holly	<i>Ilex aquifolium</i>	O
Common ivy	<i>Hedera helix</i>	O
Common mouse-ear	<i>Cerastium fontanum</i>	O
Common nettle	<i>Urtica dioica</i>	LF
Common ragwort	<i>Senecio jacobaea</i>	LF
Common sorrel	<i>Rumex acetosa</i>	LF
Common vetch	<i>Vicia sativa</i>	O
Creeping bent	<i>Agrostis stolonifera</i>	LF
Creeping buttercup	<i>Ranunculus repens</i>	LA
Creeping thistle	<i>Cirsium arvense</i>	O
Cuckooflower	<i>Cardamine pratensis</i>	LF
Curled dock	<i>Rumex crispus</i>	O
Currant	<i>Ribes</i> sp.	LF
Daisy	<i>Bellis perennis</i>	O-LF
Dandelion	<i>Taraxacum officinale</i> agg.	LF
Dog lichen	<i>Peltigera</i> sp.	LF
Dog rose	<i>Rosa canina</i>	O
False oat-grass	<i>Arrhenatherum elatius</i>	O
Field wood-rush	<i>Luzula campestris</i>	LF
Floating sweet-grass	<i>Glyceria fluitans</i>	O
Foxglove	<i>Digitalis purpurea</i>	O
Greater plantain	<i>Plantago major</i>	O

Common Name	Latin Name	Frequency (DAFOR)
Grey-cushioned grimmia	<i>Grimmia pulvinata</i>	O
Hawthorn	<i>Crataegus monogyna</i>	O
Heath bedstraw	<i>Galium saxatile</i>	LF
Heath star moss	<i>Campylopus introflexus</i>	O
Herb Robert	<i>Geranium robertianum</i>	O
Hedge bindweed	<i>Calystegia sepium</i>	O
Hypnum moss	<i>Hypnum cupressiforme</i>	O
Lesser trefoil	<i>Trifolium dubium</i>	LF
Male fern	<i>Dryopteris filix-mas</i>	O
Marsh thistle	<i>Cirsium palustre</i>	O
Mat-grass	<i>Nardus stricta</i>	O
Meadow buttercup	<i>Ranunculus acris</i>	O
Meadow foxtail	<i>Alopecurus pratensis</i>	O
Meadow grass	35o asp.	O
Neat feather moss	<i>Pseudoscleropodium purum</i>	O
Orange hawkweed	<i>Pilosella aurantiaca</i>	R
Pedunculate oak	<i>Quercus robur</i>	O
Perennial rye-grass	<i>Lolium perennis</i>	LA-LD
Pignut	<i>Conopodium majus</i>	LF
Pointed spear-moss	<i>Calliergonella cuspidata</i>	LF
Privet	<i>Ligustrum sp.</i>	O
Procumbent pearlwort	<i>Sagina procumbens</i>	LF
Red clover	<i>Trifolium pratense</i>	O
Red fescue	<i>Festuca rubra</i>	O
Ribwort plantain	<i>Plantago lanceolata</i>	LF
Rough-stalked feather moss	<i>Brachythecium rutabulum</i>	O
Rosebay willowherb	<i>Chamerion angustifolium</i>	LF
Rowan	<i>Sorbus aucuparia</i>	R
Sheep's fescue	<i>Festuca ovina</i>	LF
Sheep's sorrel	<i>Rumex acetosella</i>	LF
Smooth-stalked meadow-grass	<i>Poa pratensis</i>	LF
Soft rush	<i>Juncus effusus</i>	LD
Spear thistle	<i>Cirsium vulgare</i>	O
Springy turf moss	<i>Rhytidiadelphus squarrosus</i>	O
Sticky mouse-ear	<i>Ceratium glomeratum</i>	O
Sweet vernal-grass	<i>Anthoxanthum odoratum</i>	LF
Sycamore	<i>Acer pseudoplatanus</i>	O
Thyme-leaved speedwell	<i>Veronica serpyllifolia</i>	O
Tufted hair grass	<i>Deschampsia cespitosa</i>	O
Water starwort	<i>Callitriche stagnalis</i>	R
White clover	<i>Trifolium repens</i>	LF
Wavy bitter-cress	<i>Cardamine flexuosa</i>	LF
Wavy hair-grass	<i>Deschampsia flexuosa</i>	R
Yorkshire fog	<i>Holcus lanatus</i>	F-LD

APPENDIX C – RESULTS OF HABITAT SUITABILITY INDEX (HSI) ASSESSMENT

Great Crested Newt Survey – Pond Details			
Project	424.04328		
Project number			
Site	Land off Lingards Road, Slaithwaite		
Pond	P1		
number/reference			
OS Grid reference			
Location details	Located several metres beyond the northern boundary of the site.		
Access permission			
Access instructions			
Landowner name			
Address/email			
Telephone			
Habitat Suitability Index			
SI1. Map location	A/B/C	A	SI value 1.00
SI2. Surface area	rectangle/ellipse/irregular	ellipse	
	length (m)	6	
	width (m)	6	
	OR estimate (m ²) if irregular		
	area (m ²) =	28.26	0.06
SI3. Dessication rate	never/rarely/sometimes/frequently	rarely	1.00
SI4. Water quality	good/moderate/poor/bad	poor	0.33
SI5. Shade	% of margin shaded 1m from bank	20	1.00
SI6. Waterfowl	absent/major/minor	major	0.01
SI7. Fish population	absent/possible/minor/major	absent	1.00
SI8. Pond density	number of ponds within 1km	6	1.00
SI9. Terrestrial habitat	good/moderate/poor/isolated	poor	0.33
SI10. Macrophyte cover	%	0	0.31
		HSI =	0.34
<i>Use provisional HSI value if above 0.75</i>		provisional HSI =	0.30
		Date undertaken	24-11-14
Notes/comments			
Small duck pond in the back garden of a residential property. An absence of any aquatic vegetation.			

APPENDIX D – RESULTS OF DESK STUDY



West Yorkshire
Ecology

West Yorkshire Joint Services

West Yorkshire Ecology
Registry of Deeds
Newstead Road
Wakefield
WF1 2DE
Tel/Fax: 01924 306 793
Email: ecology@wyjs.org.uk

ECOLOGICAL RECORDS SEARCH

FOR

**LANGARDS ROAD,
SLAITHEWAITE**

Ref No:- 20141121 K720 LP

Date: 02/12/2014

Prepared For Gary Oliver

SLR Consulting Ltd



West Yorkshire
Joint Services

Bradford Calderdale Kirklees Leeds Wakefield

Table of Contents

1	Introduction.....	1
2	Species.....	1
2.1	Sensitive Species Records.....	21
2.1.1	Badgers	21
3	Designated sites.....	21
3.1	Internationally Designated site	21
3.1.1	Special Protection Areas.....	21
3.1.2	Special Areas of Conservation.....	22
3.2	Nationally Designated Sites.....	22
3.2.1	Sites of Special Scientific Interest	22
3.3	Locally Designated Sites	22
3.3.1	Sites of Scientific Interest.....	22
3.3.2	Local Nature Reserves	22
3.3.3	Local Wildlife Sites.....	22
3.3.4	Kirklees – Sites of Wildlife Significance	22
3.3.5	Local Geological Sites	23
4	Habitats	25
4.1	UK Priority Habitats	25

List of Figures

Figure 1 – Species and Designated Sites.....	24
Figure 2 – UK Priority Habitats	26

List of Appendices

Appendix A – Explanation of Species Designations	i
Appendix B – Designated Site Citations	iii

1 Introduction

This report provides a summary of the protected and notable species, habitats and designated sites information held by West Yorkshire Ecology (WYE) within 2km of grid reference SE 07340 13401.

The information within this report is supplied subject to WYE's 'Terms and Conditions', which can be viewed on the WYE website (<http://www.ecology.wyjs.org.uk>).

2 Species

West Yorkshire Ecology holds the following records within your defined search area.

AMPHIBIANS

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE075128	Common Toad	<i>Bufo bufo</i>	18/07/2005	field record		Sch5_sect9.5b; UKBAP; WYBAP; Kirklees BAP
SE0752512883	Common Toad	<i>Bufo bufo</i>	18/07/2005	Casualty	1 Count of Adult	Sch5_sect9.5b; UKBAP; WYBAP; Kirklees BAP
SE08631421	Common Toad	<i>Bufo bufo</i>	15/07/2005	field record		Sch5_sect9.5b; UKBAP; WYBAP; Kirklees BAP
SE067143	Common Frog	<i>Rana temporaria</i>	01/03/1999	Egg		Sch5_sect9.5b; WYBAP
SE073141	Common Frog	<i>Rana temporaria</i>	01/03/1999	Egg		Sch5_sect9.5b; WYBAP
SE073141	Common Frog	<i>Rana temporaria</i>	01/07/1999	field record		Sch5_sect9.5b; WYBAP
SE059127	Smooth Newt	<i>Triturus vulgaris</i>	11/07/2005	field record	1 Count of Adult Male; 1 Count of Adult Female	Sch5_sect9.5b; WYBAP
SE05921278	Smooth Newt	<i>Triturus vulgaris</i>	11/07/2005	field record	1 Count of Adult Male; 1 Count of Adult Female	Sch5_sect9.5b; WYBAP

BIRDS

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE0676011646	Common Sandpiper	<i>Actitis hypoleucos</i>	28/05/2012	field record	1 Count of Pair	BoCC:Amber
SE070115	Common Sandpiper	<i>Actitis hypoleucos</i>	1970 - 1988	field record		BoCC:Amber
SE090145	Common Sandpiper	<i>Actitis hypoleucos</i>	1970 - 1988	field record		BoCC:Amber
SE0548013780	Skylark	<i>Alauda arvensis</i>	23/04/2000 - 05/06/2000	field record		BoCC:Red; UKBAP;

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
						WYBAP; Kirklees BAP
SE0550013710	Skylark	<i>Alauda arvensis</i>	23/04/2000 - 05/06/2000	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0562013600	Skylark	<i>Alauda arvensis</i>	23/04/2000 - 05/06/2000	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0567013700	Skylark	<i>Alauda arvensis</i>	23/04/2000 - 05/06/2000	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0569013360	Skylark	<i>Alauda arvensis</i>	23/04/2000 - 05/06/2000	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0576013540	Skylark	<i>Alauda arvensis</i>	23/04/2000 - 05/06/2000	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0579013320	Skylark	<i>Alauda arvensis</i>	23/04/2000 - 05/06/2000	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0586013770	Skylark	<i>Alauda arvensis</i>	23/04/2000 - 05/06/2000	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0589013210	Skylark	<i>Alauda arvensis</i>	23/04/2000 - 05/06/2000	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0591913700	Skylark	<i>Alauda arvensis</i>	23/04/2000 - 05/06/2000	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0595413881	Skylark	<i>Alauda arvensis</i>	23/04/2000 - 05/06/2000	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0603214139	Skylark	<i>Alauda arvensis</i>	23/04/2000 - 05/06/2000	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0673411809	Skylark	<i>Alauda arvensis</i>	17/04/2012	field record	1 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE070115	Skylark	<i>Alauda arvensis</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0727411657	Skylark	<i>Alauda arvensis</i>	28/05/2012	field record	1 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE0737011789	Skylark	<i>Alauda arvensis</i>	17/04/2012	field record	1 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0815011590	Skylark	<i>Alauda arvensis</i>	01/05/2000 - 14/06/2000	field record	2 Count of Breeding Pair	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0883612549	Skylark	<i>Alauda arvensis</i>	16/04/2012	field record	1 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0886312398	Skylark	<i>Alauda arvensis</i>	28/05/2012	field record	1 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0892512205	Skylark	<i>Alauda arvensis</i>	28/05/2012	field record	1 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE06511314	Kingfisher	<i>Alcedo atthis</i>	17/07/2005	field record		Sch1_part1; BoCC:Amber
SE06511314	Kingfisher	<i>Alcedo atthis</i>	29/06/2005	field record	1 Count of Adult	Sch1_part1; BoCC:Amber
se07001344	Kingfisher	<i>Alcedo atthis</i>	07/10/2011	field record	1 Count	Sch1_part1; BoCC:Amber
SE073141	Kingfisher	<i>Alcedo atthis</i>	March 1999 - December 1999	field record		Sch1_part1; BoCC:Amber
SE088143	Kingfisher	<i>Alcedo atthis</i>	1970 - 1988	field record		Sch1_part1; BoCC:Amber
SE070115	Teal	<i>Anas crecca</i>	1970 - 1973	field record		BoCC:Amber
SE070115	Teal	<i>Anas crecca</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Wigeon	<i>Anas penelope</i>	1970 - 1988	field record		BoCC:Amber
SE06511314	Mallard	<i>Anas platyrhynchos</i>	29/06/2005	field record		BoCC:Amber
SE06921336	Mallard	<i>Anas platyrhynchos</i>	29/06/2005	field record		BoCC:Amber
SE070115	Mallard	<i>Anas platyrhynchos</i>	1970 - 1973	field record		BoCC:Amber
SE070115	Mallard	<i>Anas platyrhynchos</i>	1970 - 1988	field record		BoCC:Amber
SE073141	Mallard	<i>Anas platyrhynchos</i>	March 1999 - December 1999	field record	3 Count of Juvenile	BoCC:Amber
SE07981301	Mallard	<i>Anas platyrhynchos</i>	18/07/2005	field record		BoCC:Amber
SE08631421	Mallard	<i>Anas platyrhynchos</i>	15/07/2005	field record		BoCC:Amber
SE090145	Mallard	<i>Anas platyrhynchos</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Meadow Pipit	<i>Anthus pratensis</i>	1970 - 1988	field record		BoCC:Amber

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE073141	Meadow Pipit	<i>Anthus pratensis</i>	March 1999 - December 1999	field record		BoCC:Amber
SE088143	Meadow Pipit	<i>Anthus pratensis</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Tree Pipit	<i>Anthus trivialis</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE05841253	Swift	<i>Apus apus</i>	09/07/2007	field record		BoCC:Amber; WYBAP
SE070115	Swift	<i>Apus apus</i>	1970 - 1988	field record		BoCC:Amber; WYBAP
SE073141	Swift	<i>Apus apus</i>	01/05/1999	field record		BoCC:Amber; WYBAP
SE088143	Swift	<i>Apus apus</i>	1970 - 1988	field record		BoCC:Amber; WYBAP
SE070115	Turnstone	<i>Arenaria interpres</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Short-Eared Owl	<i>Asio flammeus</i>	1970 - 1988	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE070142	Short-Eared Owl	<i>Asio flammeus</i>	March 1999 - December 1999	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE070115	Pochard	<i>Aythya ferina</i>	1970 - 1988	field record		BoCC:Amber
SE061128	Tufted Duck	<i>Aythya fuligula</i>	22/02/2005	field record		BoCC:Amber
SE070115	Tufted Duck	<i>Aythya fuligula</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Scaup	<i>Aythya marila</i>	1970 - 1988	field record		Sch1_part1; BoCC:Red; UKBAP
SE070115	Goldeneye	<i>Bucephala clangula</i>	1970 - 1988	field record		Sch1_part2; BoCC:Amber
SE070115	Goldeneye	<i>Bucephala clangula</i>	1970 - 1973	field record		Sch1_part2; BoCC:Amber
SE070115	Dunlin	<i>Calidris alpina</i>	1970 - 1988	field record		BoCC:Red; WYBAP; Kirklees BAP
SE070115	Knot	<i>Calidris canutus</i>	1970 - 1988	field record		BoCC:Amber
SE0648911850	Linnet	<i>Carduelis cannabina</i>	28/05/2012	field record	1 Count of Pair	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0734011554	Linnet	<i>Carduelis cannabina</i>	28/05/2012	field record	1 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0894712440	Linnet	<i>Carduelis cannabina</i>	28/05/2012	field record	2 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE070115	Goldfinch	<i>Carduelis carduelis</i>	1970 - 1988	field record		Kirklees BAP

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE073141	Goldfinch	<i>Carduelis carduelis</i>	March 1999 - December 1999	field record		Kirklees BAP
SE084145	Goldfinch	<i>Carduelis carduelis</i>	2008	field record		Kirklees BAP
SE088143	Goldfinch	<i>Carduelis carduelis</i>	1970 - 1988	field record		Kirklees BAP
SE056125	Twite	<i>Carduelis flavirostris</i>	19/06/2003	field record	2 Count of Juvenile; 7 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0660311907	Twite	<i>Carduelis flavirostris</i>	17/04/2012	field record	2 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0672911561	Twite	<i>Carduelis flavirostris</i>	15/06/2008	field record	1 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE06931187	Twite	<i>Carduelis flavirostris</i>	19/06/2011	Secondhand report		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE070115	Twite	<i>Carduelis flavirostris</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0711011718	Twite	<i>Carduelis flavirostris</i>	17/04/2012	field record	1 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0718611548	Twite	<i>Carduelis flavirostris</i>	17/04/2012	field record	3 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0730011679	Twite	<i>Carduelis flavirostris</i>	17/04/2012	field record	33 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0738011559	Twite	<i>Carduelis flavirostris</i>	17/04/2012	field record	18 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE070115	Little Ringed Plover	<i>Charadrius dubius</i>	01/06/1988	field record	1 Count of Adult	Sch1_part1
SE070115	Little Ringed Plover	<i>Charadrius dubius</i>	1970 - 1988	field record		Sch1_part1
SE070115	Ringed Plover	<i>Charadrius hiaticula</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Long-Tailed Duck	<i>Clangula hyemalis</i>	1970 - 1988	field record		Sch1_part1
SE070115	Stock Dove	<i>Columba oenas</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Cuckoo	<i>Cuculus canorus</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE073141	Whooper Swan	<i>Cygnus cygnus</i>	06/11/1999	field record	2 Count of Adult	Sch1_part1; BoCC:Amber
SE070115	House Martin	<i>Delichon urbica</i>	1970 - 1988	field record		BoCC:Amber; WYBAP
SE073141	House Martin	<i>Delichon urbica</i>	March 1999 - December 1999	field record		BoCC:Amber; WYBAP
SE084145	House Martin	<i>Delichon urbica</i>	2008	field record		BoCC:Amber; WYBAP
SE088143	House Martin	<i>Delichon urbica</i>	1970 - 1988	field record		BoCC:Amber; WYBAP
SE090145	House Martin	<i>Delichon urbica</i>	1970 - 1988	field record		BoCC:Amber; WYBAP
SE0667811848	Reed Bunting	<i>Emberiza schoeniclus</i>	17/04/2012	field record	1 Count of Adult	BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE070115	Reed Bunting	<i>Emberiza schoeniclus</i>	1970 - 1988	field record		BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE088143	Reed Bunting	<i>Emberiza schoeniclus</i>	1970 - 1988	field record		BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE067143	Merlin	<i>Falco columbarius</i>	March 1999 - December 1999	field record		Sch1_part1; BoCC:Amber; WYBAP; Kirklees BAP
SE0732011612	Merlin	<i>Falco columbarius</i>	17/04/2012	field record	1 Count of Adult	Sch1_part1; BoCC:Amber; WYBAP; Kirklees BAP
SE070115	Kestrel	<i>Falco tinnunculus</i>	1970 - 1988	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE084145	Kestrel	<i>Falco tinnunculus</i>	2008	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE0899512720	Kestrel	<i>Falco tinnunculus</i>	16/04/2012	field record	1 Count of Adult	BoCC:Amber; WYBAP; Kirklees BAP
SE073141	Brambling	<i>Fringilla montifringilla</i>	March 1999 - December 1999	field record		Sch1_part1
SE070115	Snipe	<i>Gallinago gallinago</i>	1970 - 1988	field record		BoCC:Amber; Kirklees BAP
SE0738911431	Snipe	<i>Gallinago gallinago</i>	28/05/2012	field record	1 Count of Adult	BoCC:Amber; Kirklees BAP
SE0743711421	Snipe	<i>Gallinago gallinago</i>	17/04/2012	field record	1 Count of Adult	BoCC:Amber; Kirklees BAP
SE0806111578	Snipe	<i>Gallinago gallinago</i>	16/04/2012	field record	1 Count of Adult	BoCC:Amber; Kirklees BAP
SE088143	Snipe	<i>Gallinago gallinago</i>	1970 - 1988	field record		BoCC:Amber; Kirklees BAP
SE070115	Oystercatcher	<i>Haematopus ostralegus</i>	1970 - 1988	field record		BoCC:Amber

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE070115	Oystercatcher	<i>Haematopus ostralegus</i>	1988	field record	2 Count of Adult	BoCC:Amber
SE073141	Oystercatcher	<i>Haematopus ostralegus</i>	01/07/1999	field record	5 Count of Adult	BoCC:Amber
SE067143	Swallow	<i>Hirundo rustica</i>	05/04/1999	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE070115	Swallow	<i>Hirundo rustica</i>	1970 - 1988	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE084145	Swallow	<i>Hirundo rustica</i>	2008	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE08631421	Swallow	<i>Hirundo rustica</i>	15/07/2005	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE088143	Swallow	<i>Hirundo rustica</i>	1970 - 1988	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE090145	Swallow	<i>Hirundo rustica</i>	1970 - 1988	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE0642011885	Red Grouse	<i>Lagopus lagopus</i>	28/05/2012	field record	1 Count of Adult	BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE0654811965	Red Grouse	<i>Lagopus lagopus</i>	17/04/2012	field record	1 Count of Adult	BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE0676811789	Red Grouse	<i>Lagopus lagopus</i>	17/04/2012	field record	1 Count of Adult; 1 Count of Male	BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE0697311850	Red Grouse	<i>Lagopus lagopus</i>	17/04/2012	field record	1 Count of Adult; 1 Count of Male	BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE070115	Red Grouse	<i>Lagopus lagopus</i>	1970 - 1988	field record		BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE070115	Herring Gull	<i>Larus argentatus</i>	1970 - 1988	field record		BoCC:Red; UKBAP
SE070115	Common Gull	<i>Larus canus</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Lesser Black-Backed Gull	<i>Larus fuscus</i>	1970 - 1988	field record		BoCC:Amber
SE0884812292	Lesser Black-Backed Gull	<i>Larus fuscus</i>	16/07/2012	field record	30 Count of Adult	BoCC:Amber
SE070115	Great Black-Backed Gull	<i>Larus marinus</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Black-Headed Gull	<i>Larus ridibundus</i>	1970 - 1988	field record		BoCC:Amber
SE073141	Black-Headed Gull	<i>Larus ridibundus</i>	March 1999 - December 1999	field record		BoCC:Amber

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE0880912276	Black-Headed Gull	<i>Larus ridibundus</i>	16/07/2012	field record	54 Count of Adult	BoCC:Amber
SE090145	Black-Headed Gull	<i>Larus ridibundus</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Bar-Tailed Godwit	<i>Limosa lapponica</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Jack Snipe	<i>Limnocryptes minimus</i>	01/11/1988	field record	1 Count of Adult	BoCC:Amber
SE070115	Common Scoter	<i>Melanitta nigra</i>	1970 - 1988	field record		Sch1_part1; BoCC:Red; UKBAP
SE070115	Grey Wagtail	<i>Motacilla cinerea</i>	1970 - 1988	field record		BoCC:Amber
SE073141	Grey Wagtail	<i>Motacilla cinerea</i>	March 1999 - December 1999	field record		BoCC:Amber
SE088143	Grey Wagtail	<i>Motacilla cinerea</i>	1970 - 1988	field record		BoCC:Amber
SE09021425	Grey Wagtail	<i>Motacilla cinerea</i>	15/07/2005	field record	1 Count of Adult	BoCC:Amber
SE0676511867	Curlew	<i>Numenius arquata</i>	17/04/2012	field record	1 Count of Adult	BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE070115	Curlew	<i>Numenius arquata</i>	1970 - 1988	field record		BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE0747811787	Curlew	<i>Numenius arquata</i>	17/04/2012	field record	1 Count of Pair	BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE0760311450	Curlew	<i>Numenius arquata</i>	17/04/2012	field record	1 Count of Pair	BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE0802211525	Curlew	<i>Numenius arquata</i>	28/05/2012	field record	1 Count of Adult	BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE070115	Whimbrel	<i>Numenius phaeopus</i>	1970 - 1988	field record		Sch1_part1; BoCC:Red
SE070115	Wheatear	<i>Oenanthe oenanthe</i>	1970 - 1988	field record		BoCC:Amber
SE0736711408	Wheatear	<i>Oenanthe oenanthe</i>	17/04/2012	field record	1 Count of Adult; 1 Count of Male	BoCC:Amber
SE0739311490	Wheatear	<i>Oenanthe oenanthe</i>	17/04/2012	field record	1 Count of Adult; 1 Count of Female	BoCC:Amber
SE0876812616	Wheatear	<i>Oenanthe oenanthe</i>	16/04/2012	field record	2 Count of Adult	BoCC:Amber
SE0881112826	Wheatear	<i>Oenanthe oenanthe</i>	16/04/2012	field record	3 Count of Adult	BoCC:Amber
SE0884612368	Wheatear	<i>Oenanthe oenanthe</i>	16/04/2012	field record	2 Count of Adult	BoCC:Amber

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE070115	House Sparrow	<i>Passer domesticus</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE073141	House Sparrow	<i>Passer domesticus</i>	March 1999 - December 1999	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE088143	House Sparrow	<i>Passer domesticus</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE090145	House Sparrow	<i>Passer domesticus</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE070115	Grey Partridge	<i>Perdix perdix</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0779311689	Grey Partridge	<i>Perdix perdix</i>	16/04/2012	field record	1 Count of Pair	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE070115	Ruff	<i>Philomachus pugnax</i>	01/08/1988	field record	1 Count of Adult	Sch1_part1; BoCC:Red
SE070115	Ruff	<i>Philomachus pugnax</i>	1970 - 1988	field record		Sch1_part1; BoCC:Red
SE070115	Redstart	<i>Phoenicurus phoenicurus</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Willow Warbler	<i>Phylloscopus trochilus</i>	1970 - 1988	field record		BoCC:Amber
SE073141	Willow Warbler	<i>Phylloscopus trochilus</i>	01/06/1999	field record		BoCC:Amber
SE090145	Willow Warbler	<i>Phylloscopus trochilus</i>	1970 - 1988	field record		BoCC:Amber
SE073141	Green Woodpecker	<i>Picus viridis</i>	March 1999 - December 1999	field record		BoCC:Amber
SE070115	Snow Bunting	<i>Plectrophenax nivalis</i>	1970 - 1988	field record		Sch1_part1; BoCC:Amber
SE070115	Golden Plover	<i>Pluvialis apricaria</i>	1970 - 1988	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE0884412235	Golden Plover	<i>Pluvialis apricaria</i>	16/04/2012	field record	6 Count of Adult	BoCC:Amber; WYBAP; Kirklees BAP
SE0906612615	Golden Plover	<i>Pluvialis apricaria</i>	16/04/2012	field record	1 Count of Adult	BoCC:Amber; WYBAP; Kirklees BAP
SE0906812478	Golden Plover	<i>Pluvialis apricaria</i>	16/04/2012	field record	1 Count of Adult	BoCC:Amber; WYBAP; Kirklees BAP
SE070115	Dunnock	<i>Prunella modularis</i>	1970 - 1988	field record		BoCC:Amber; UKBAP; WYBAP; Kirklees BAP

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE073141	Dunnock	<i>Prunella modularis</i>	March 1999 - December 1999	field record		BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE088143	Dunnock	<i>Prunella modularis</i>	1970 - 1988	field record		BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE073141	Bullfinch	<i>Pyrrhula pyrrhula</i>	March 1999 - December 1999	field record		BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE090145	Bullfinch	<i>Pyrrhula pyrrhula</i>	1970 - 1988	field record		BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE088143	Water Rail	<i>Rallus aquaticus</i>	1970 - 1988	field record		Kirklees BAP
SE088143	Sand Martin	<i>Riparia riparia</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Whinchat	<i>Saxicola rubetra</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Common Tern	<i>Sterna hirundo</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Arctic Tern	<i>Sterna paradisaea</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Starling	<i>Sturnus vulgaris</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE073141	Starling	<i>Sturnus vulgaris</i>	March 1999 - December 1999	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0882312289	Starling	<i>Sturnus vulgaris</i>	28/05/2012	field record	100 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0888612302	Starling	<i>Sturnus vulgaris</i>	16/07/2012	field record	700 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE090145	Starling	<i>Sturnus vulgaris</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE070115	Shelduck	<i>Tadorna tadorna</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Spotted Redshank	<i>Tringa erythropus</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Greenshank	<i>Tringa nebularia</i>	1970 - 1988	field record		Sch1_part1
SE070115	Green Sandpiper	<i>Tringa ochropus</i>	1970 - 1988	field record		Sch1_part1; BoCC:Amber
SE070115	Redshank	<i>Tringa totanus</i>	1970 - 1988	field record		BoCC:Amber
SE070115	Redwing	<i>Turdus iliacus</i>	1970 - 1988	field record		Sch1_part1; BoCC:Red

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE073141	Song Thrush	<i>Turdus philomelos</i>	March 1999 - December 1999	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE070115	Fieldfare	<i>Turdus pilaris</i>	1970 - 1988	field record		Sch1_part1; BoCC:Red
SE070115	Ring Ouzel	<i>Turdus torquatus</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE06511314	Mistle Thrush	<i>Turdus viscivorus</i>	29/06/2005	field record	1 Count of Pair	BoCC:Amber
SE070115	Mistle Thrush	<i>Turdus viscivorus</i>	1970 - 1988	field record		BoCC:Amber
SE073141	Mistle Thrush	<i>Turdus viscivorus</i>	March 1999 - December 1999	field record		BoCC:Amber
SE090145	Mistle Thrush	<i>Turdus viscivorus</i>	1970 - 1988	field record		BoCC:Amber
SE088143	Barn Owl	<i>Tyto alba</i>	1970 - 1988	field record		Sch1_part1 Sch9_part1; BoCC:Amber; WYBAP; Kirklees BAP
SE0562013600	Lapwing	<i>Vanellus vanellus</i>	23/04/2000 - 05/06/2000	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0572013940	Lapwing	<i>Vanellus vanellus</i>	26/04/2000	field record	1 Count of Breeding Pair	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE064138	Lapwing	<i>Vanellus vanellus</i>	16/04/2003	Breeding probable	2 Count of Adult Male	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE070115	Lapwing	<i>Vanellus vanellus</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE070127	Lapwing	<i>Vanellus vanellus</i>	16/04/2003	Breeding probable	2 Count of Adult Male	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE070128	Lapwing	<i>Vanellus vanellus</i>	16/04/2003	Breeding probable	3 Count of Adult Male	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE070128	Lapwing	<i>Vanellus vanellus</i>	12/05/2003	Breeding possible	2 Count	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE071128	Lapwing	<i>Vanellus vanellus</i>	16/04/2003	in flight	1 Count of Adult Male; 1 Count	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0743711421	Lapwing	<i>Vanellus vanellus</i>	17/04/2012	field record	1 Count of Adult	BoCC:Red; UKBAP;

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
						WYBAP; Kirklees BAP
SE0744411514	Lapwing	<i>Vanellus vanellus</i>	28/05/2012	field record	1 Count of Pair	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0757311502	Lapwing	<i>Vanellus vanellus</i>	17/04/2012	field record	1 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0796912391	Lapwing	<i>Vanellus vanellus</i>	18/07/2005	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0881512427	Lapwing	<i>Vanellus vanellus</i>	28/05/2012	field record	1 Count of Pair	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0884612399	Lapwing	<i>Vanellus vanellus</i>	16/04/2012	field record	1 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0887312150	Lapwing	<i>Vanellus vanellus</i>	16/04/2012	field record	1 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0888212179	Lapwing	<i>Vanellus vanellus</i>	28/05/2012	field record	1 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE090145	Lapwing	<i>Vanellus vanellus</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE0915212668	Lapwing	<i>Vanellus vanellus</i>	28/05/2012	field record	2 Count of Adult	BoCC:Red; UKBAP; WYBAP; Kirklees BAP

FISH

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE06511314	Brown Trout	<i>Salmo trutta subsp. fario</i>	29/06/2005	field record		UKBAP; WYBAP

CRUSTACEANS

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE0741713700	Freshwater Crayfish	<i>Austropotamobius pallipes</i>	21/08/2007	field record		Sch5_sect9.1 (part) & 9.5; UKBAP; WYBAP

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE075137	Freshwater Crayfish	<i>Austropotamobius pallipes</i>	1986	field record		Sch5_sect9.1 (part) & 9.5; UKBAP; WYBAP
SE075137	Freshwater Crayfish	<i>Austropotamobius pallipes</i>	1988	field record		Sch5_sect9.1 (part) & 9.5; UKBAP; WYBAP
SE080140	Freshwater Crayfish	<i>Austropotamobius pallipes</i>	1988	field record		Sch5_sect9.1 (part) & 9.5; UKBAP; WYBAP
SE080140	Freshwater Crayfish	<i>Austropotamobius pallipes</i>	1970	field record		Sch5_sect9.1 (part) & 9.5; UKBAP; WYBAP

PLANTS

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE05921278	New Zealand Pigmyweed	<i>Crassula helmsii</i>	11/07/2005	field record		Sch9_part2
SE06351435	Montbretia	<i>Crocsmia x crocosmiiflora</i>	05/06/2004	field record		Sch9_part2
SE05571248	Canadian Waterweed	<i>Elodea canadensis</i>	01/08/1978	field record		Sch9_part2
SE05751252	Canadian Waterweed	<i>Elodea canadensis</i>	01/08/1978	field record		Sch9_part2
SE05911267	Canadian Waterweed	<i>Elodea canadensis</i>	01/08/1978	field record		Sch9_part2
SE06191302	Canadian Waterweed	<i>Elodea canadensis</i>	01/08/1978	field record		Sch9_part2
SE06401313	Canadian Waterweed	<i>Elodea canadensis</i>	01/08/1978	field record		Sch9_part2
SE069144	Canadian Waterweed	<i>Elodea canadensis</i>	20/08/1986	field record		Sch9_part2
SE07701388	Canadian Waterweed	<i>Elodea canadensis</i>	01/08/1978	field record		Sch9_part2
SE07971399	Canadian Waterweed	<i>Elodea canadensis</i>	01/08/1978	field record		Sch9_part2
SE08311411	Canadian Waterweed	<i>Elodea canadensis</i>	01/08/1978	field record		Sch9_part2
SE05801255	Japanese Knotweed	<i>Fallopia japonica</i>	June 2007 - July 2007	field record		Sch9_part2
SE058125	Japanese Knotweed	<i>Fallopia japonica</i>	June 2007 - July 2007	field record		Sch9_part2
SE05871244	Japanese Knotweed	<i>Fallopia japonica</i>	June 2007 - July 2007	field record		Sch9_part2
SE06511314	Japanese Knotweed	<i>Fallopia japonica</i>	29/06/2005	field record		Sch9_part2
SE06921336	Japanese Knotweed	<i>Fallopia japonica</i>	29/06/2005	field record		Sch9_part2

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE073141	Japanese Knotweed	<i>Fallopia japonica</i>	March 1999 - December 1999	field record		Sch9_part2
Se08061351	Japanese Knotweed	<i>Fallopia japonica</i>	18/07/2005	field record		Sch9_part2
SE08631421	Japanese Knotweed	<i>Fallopia japonica</i>	15/07/2005	field record		Sch9_part2
SE09021425	Japanese Knotweed	<i>Fallopia japonica</i>	15/07/2005	field record		Sch9_part2
SE09021439	Japanese Knotweed	<i>Fallopia japonica</i>	15/07/2005	field record		Sch9_part2
SE05871244	Bluebell	<i>Hyacinthoides non-scripta</i>	June 2007 - July 2007	field record		Sch8_sect 13.2; Kirklees BAP
SE06351435	Bluebell	<i>Hyacinthoides non-scripta</i>	05/06/2004	field record		Sch8_sect 13.2; Kirklees BAP
SE068143	Bluebell	<i>Hyacinthoides non-scripta</i>	10/06/2001	field record		Sch8_sect 13.2; Kirklees BAP
SE069142	Bluebell	<i>Hyacinthoides non-scripta</i>	10/06/2001	field record		Sch8_sect 13.2; Kirklees BAP
SE072141	Bluebell	<i>Hyacinthoides non-scripta</i>	10/06/2001	field record		Sch8_sect 13.2; Kirklees BAP
SE073141	Bluebell	<i>Hyacinthoides non-scripta</i>	March 1999 - December 1999	field record		Sch8_sect 13.2; Kirklees BAP
SE084145	Bluebell	<i>Hyacinthoides non-scripta</i>	2008	field record		Sch8_sect 13.2; Kirklees BAP
SE05801255	Indian Balsam	<i>Impatiens glandulifera</i>	June 2007 - July 2007	field record		Sch9_part2
SE05821245	Indian Balsam	<i>Impatiens glandulifera</i>	June 2007 - July 2007	field record		Sch9_part2
SE05871244	Indian Balsam	<i>Impatiens glandulifera</i>	June 2007 - July 2007	field record		Sch9_part2
SE05871252	Indian Balsam	<i>Impatiens glandulifera</i>	June 2007 - July 2007	field record		Sch9_part2
SE06351435	Indian Balsam	<i>Impatiens glandulifera</i>	05/06/2004	field record		Sch9_part2
SE06511314	Indian Balsam	<i>Impatiens glandulifera</i>	29/06/2005	field record		Sch9_part2
SE06691325	Indian Balsam	<i>Impatiens glandulifera</i>	11/07/2005	field record		Sch9_part2
SE06921336	Indian Balsam	<i>Impatiens glandulifera</i>	29/06/2005	field record		Sch9_part2
SE070142	Indian Balsam	<i>Impatiens glandulifera</i>	March 1999 - December 1999	field record		Sch9_part2
SE07981301	Indian Balsam	<i>Impatiens glandulifera</i>	18/07/2005	field record		Sch9_part2
SE084145	Indian Balsam	<i>Impatiens glandulifera</i>	2008	field record		Sch9_part2
SE08631421	Indian Balsam	<i>Impatiens glandulifera</i>	15/07/2005	field record		Sch9_part2
SE08841432	Indian Balsam	<i>Impatiens glandulifera</i>	01/08/1978	field record		Sch9_part2
SE09021425	Indian Balsam	<i>Impatiens glandulifera</i>	15/07/2005	field record		Sch9_part2
SE09021439	Indian Balsam	<i>Impatiens glandulifera</i>	15/07/2005	field record		Sch9_part2

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE0713	Floating Water-Plantain	<i>Luronium natans</i>	Unknown	field record		Sch8; UKBAP; WYBAP
SE080140	Floating Water-Plantain	<i>Luronium natans</i>	1985	field record		Sch8; UKBAP; WYBAP
SE0814	Floating Water-Plantain	<i>Luronium natans</i>	Unknown	field record		Sch8; UKBAP; WYBAP
SE08311411	Floating Water-Plantain	<i>Luronium natans</i>	01/08/1978	field record		Sch8; UKBAP; WYBAP
SE090140	Floating Water-Plantain	<i>Luronium natans</i>	1991	field record		Sch8; UKBAP; WYBAP
SE0914	Floating Water-Plantain	<i>Luronium natans</i>	Unknown	field record		Sch8; UKBAP; WYBAP
SE05871244	Rhododendron	<i>Rhododendron ponticum</i>	June 2007 - July 2007	field record		Sch9_part2
SE084145	Rhododendron	<i>Rhododendron ponticum</i>	2008	field record		Sch9_part2
SE06351435	Japanese Rose	<i>Rosa rugosa</i>	05/06/2004	field record		Sch9_part2
SE073141	Corn Spurrey	<i>Spergula arvensis</i>	01/08/1999	field record		RDB:post2001:V U
SE055137	Cowberry	<i>Vaccinium vitis-idaea</i>	Unknown	field record		Kirklees BAP

INVERTEBRATES - BEETLES

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE090130	Aphodius conspurcatus	<i>Aphodius conspurcatus</i>	Unknown	field record		Notable:B
SE070115	Aphodius fasciatus	<i>Aphodius fasciatus</i>	Unknown	field record		Notable:B
SE090130	Aphodius sordidus	<i>Aphodius sordidus</i>	Unknown	field record		Notable:A
SE090130	Barynotus squamosus	<i>Barynotus squamosus</i>	Unknown	field record		Notable:B
SE090130	Bembidion fumigatum	<i>Bembidion fumigatum</i>	Unknown	field record		Notable:B
SE090130	Bembidion gilvipes	<i>Bembidion gilvipes</i>	Unknown	field record		Notable:B
SE090130	Bembidion obliquum	<i>Bembidion obliquum</i>	Unknown	field record		Notable:B
SE090130	Catapion pubescens	<i>Catapion pubescens</i>	Unknown	field record		Notable:B
SE090130	Cercyon ustulatus	<i>Cercyon ustulatus</i>	Unknown	field record		Notable:B
SE090130	Enicmus brevicornis	<i>Enicmus brevicornis</i>	Unknown	field record		Notable
SE090130	Falagria sulcatula	<i>Falagria sulcatula</i>	Unknown	field record		Notable
SE090130	Gyrophana manca	<i>Gyrophana manca</i>	Unknown	field record		Notable
SE070115	Hydnobius punctatus	<i>Hydnobius punctatus</i>	Unknown	field record		Notable
SE090130	Hydnobius punctatus	<i>Hydnobius punctatus</i>	Unknown	field record		Notable

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE070115	Hydnobius spinipes	<i>Hydnobius spinipes</i>	Unknown	field record		RDB:Pre94:Inde
SE078142	Flax Flea Beetle	<i>Longitarsus parvulus</i>	Unknown	field record		Notable:A
SE090130	Flax Flea Beetle	<i>Longitarsus parvulus</i>	Unknown	field record		Notable:A
SE070115	Miscodera arctica	<i>Miscodera arctica</i>	Unknown	field record		Notable:B
SE090130	Miscodera arctica	<i>Miscodera arctica</i>	Unknown	field record		Notable:B
SE090130	Mycetoporus despectus	<i>Mycetoporus despectus</i>	Unknown	field record		Notable
SE090130	Omalium allardi	<i>Omalium allardi</i>	Unknown	field record		Notable
SE090130	Omalium exiguum	<i>Omalium exiguum</i>	Unknown	field record		Notable
SE090130	Omalium rugatum	<i>Omalium rugatum</i>	Unknown	field record		Notable
SE090130	Oreodytes davisii	<i>Oreodytes davisii</i>	Unknown	field record		Notable:B
SE090130	Proteinus crenulatus	<i>Proteinus crenulatus</i>	Unknown	field record		Notable:B
SE090130	Quedius longicornis	<i>Quedius longicornis</i>	Unknown	field record		Notable:B
SE090130	Large Fruit Bark Beetle	<i>Scolytus mali</i>	Unknown	field record		Notable:B
SE090130	Stenus europaeus	<i>Stenus europaeus</i>	Unknown	field record		Notable:B
SE090130	Stenus oscillator	<i>Stenus oscillator</i>	Unknown	field record		Notable:B
SE090130	Stenus pusillus	<i>Stenus pusillus</i>	Unknown	field record		Notable:B
SE090130	Trichophya pilicornis	<i>Trichophya pilicornis</i>	Unknown	field record		Notable:B

INVERTEBRATES - BUTTERFLIES

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE0614	Small Heath	<i>Coenonympha pamphilus</i>	2004	field record		UKBAP
SE06351435	Small Heath	<i>Coenonympha pamphilus</i>	05/06/2004	field record		UKBAP
SE0914	Small Heath	<i>Coenonympha pamphilus</i>	2006	field record		UKBAP
SE0612	Wall	<i>Lasiommata megera</i>	2004	field record		UKBAP; WYBAP
SE0614	Wall	<i>Lasiommata megera</i>	2004	field record		UKBAP; WYBAP
SE06351435	Wall	<i>Lasiommata megera</i>	05/06/2004	field record		UKBAP; WYBAP

INVERTEBRATES – TRUE FLY (DIPTERA)

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE06351435	Snipe flies	<i>Atrichops crassipes</i>	05/06/2004	field record		RDB:Pre94:NR
SE090130	Platycheirus podagratus	<i>Platycheirus podagratus</i>	Unknown	field record		Notable

TERRESTRIAL MAMMALS

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE068133	Water Vole	<i>Arvicola terrestris</i>	09/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE069142	Water Vole	<i>Arvicola terrestris</i>	02/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE069143	Water Vole	<i>Arvicola terrestris</i>	02/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE069144	Water Vole	<i>Arvicola terrestris</i>	02/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE070142	Water Vole	<i>Arvicola terrestris</i>	02/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE070143	Water Vole	<i>Arvicola terrestris</i>	02/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE071135	Water Vole	<i>Arvicola terrestris</i>	06/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE072135	Water Vole	<i>Arvicola terrestris</i>	06/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE072136	Water Vole	<i>Arvicola terrestris</i>	06/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE072143	Water Vole	<i>Arvicola terrestris</i>	02/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE073136	Water Vole	<i>Arvicola terrestris</i>	06/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE073141	Water Vole	<i>Arvicola terrestris</i>	01/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE073143	Water Vole	<i>Arvicola terrestris</i>	02/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE074137	Water Vole	<i>Arvicola terrestris</i>	06/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE074143	Water Vole	<i>Arvicola terrestris</i>	02/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE075138	Water Vole	<i>Arvicola terrestris</i>	06/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE075142	Water Vole	<i>Arvicola terrestris</i>	02/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE075143	Water Vole	<i>Arvicola terrestris</i>	02/09/1999	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE073141	Hedgehog	<i>Erinaceus europaeus</i>	March 1999 - December 1999	field record		UKBAP; WYBAP; Kirklees BAP
SE060139	Brown Hare	<i>Lepus europaeus</i>	30/11/1996	field record	5 Count of Adult	UKBAP; WYBAP; Kirklees BAP
SE060139	Brown Hare	<i>Lepus europaeus</i>	10/01/1998	field record	7 Count of Adult	UKBAP; WYBAP; Kirklees BAP
SE060139	Brown Hare	<i>Lepus europaeus</i>	28/11/1998	field record	2 Count of Adult	UKBAP; WYBAP; Kirklees BAP
SE060139	Brown Hare	<i>Lepus europaeus</i>	16/01/1999	field record	6 Count of Adult	UKBAP; WYBAP; Kirklees BAP
se069123	Brown Hare	<i>Lepus europaeus</i>	12/08/2011	field record	1 Count	UKBAP; WYBAP; Kirklees BAP
SE073137	Brown Hare	<i>Lepus europaeus</i>	11/01/1997	field record	5 Count of Adult	UKBAP; WYBAP; Kirklees BAP
SE078125	Brown Hare	<i>Lepus europaeus</i>	19/10/1996	field record	5 Count of Adult	UKBAP; WYBAP; Kirklees BAP
SE078125	Brown Hare	<i>Lepus europaeus</i>	18/10/1997	field record	7 Count of Adult	UKBAP; WYBAP; Kirklees BAP
SE08631290	Weasel	<i>Mustela nivalis</i>	18/07/2005	field record		Kirklees BAP
SE05921278	American Mink	<i>Mustela vison</i>	11/07/2005	field record		Sch9_part1
SE06691325	American Mink	<i>Mustela vison</i>	11/07/2005	Spraint	1 Count of Droppings	Sch9_part1
SE075141	American Mink	<i>Mustela vison</i>	March 1999 - December 1999	field record		Sch9_part1
SE0712	Unidentified Bat	<i>Myotis</i>	01/11/2008	aural bat detector		
SE0713	Unidentified Bat	<i>Myotis</i>	01/11/2008	aural bat detector		
SE0914	Unidentified Bat	<i>Myotis</i>	01/11/2008	aural bat detector		
SE058124	Daubenton's Bat	<i>Myotis daubentonii</i>	16/07/2007	aural bat detector		Sch5; WYBAP; Kirklees BAP
SE0914	Daubenton's Bat	<i>Myotis daubentonii</i>	01/11/2008	aural bat detector		Sch5; WYBAP; Kirklees BAP

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE0712	Whiskered Bat	<i>Myotis mystacinus</i>	01/11/2008	aural bat detector		Sch5; WYBAP; Kirklees BAP
SE0914	Whiskered Bat	<i>Myotis mystacinus</i>	01/11/2008	aural bat detector		Sch5; WYBAP; Kirklees BAP
SE0712	Natterer's Bat	<i>Myotis nattereri</i>	01/11/2008	aural bat detector		Sch5; WYBAP; Kirklees BAP
SE0713	Natterer's Bat	<i>Myotis nattereri</i>	01/11/2008	aural bat detector		Sch5; WYBAP; Kirklees BAP
SE0914	Natterer's Bat	<i>Myotis nattereri</i>	01/11/2008	aural bat detector		Sch5; WYBAP; Kirklees BAP
SE058124	Lesser Noctule Bat	<i>Nyctalus leisleri</i>	16/07/2007	aural bat detector		Sch5; WYBAP; Kirklees BAP
SE0712	Lesser Noctule Bat	<i>Nyctalus leisleri</i>	01/11/2008	aural bat detector		Sch5; WYBAP; Kirklees BAP
SE0713	Lesser Noctule Bat	<i>Nyctalus leisleri</i>	01/11/2008	aural bat detector		Sch5; WYBAP; Kirklees BAP
SE058124	Noctule	<i>Nyctalus noctula</i>	16/07/2007	aural bat detector		Sch5; UKBAP; WYBAP; Kirklees BAP
SE0702213478	Noctule	<i>Nyctalus noctula</i>	12/02/2012	Roost (hibernacula)		Sch5; UKBAP; WYBAP; Kirklees BAP
SE071142	Noctule	<i>Nyctalus noctula</i>	23/07/2005	aural bat detector	1 Count of Individual	Sch5; UKBAP; WYBAP; Kirklees BAP
SE05801251	Pipistrelle	<i>Pipistrellus pipistrellus</i>	Jul-07	field record		Sch5; WYBAP; Kirklees BAP
SE05811249	Pipistrelle	<i>Pipistrellus pipistrellus</i>	Unknown	dung/droppings/frass /pellet, etc.		Sch5; WYBAP; Kirklees BAP
SE0584012530	Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	16/07/2007	Roost		Sch5; WYBAP; Kirklees BAP
SE05841253	Pipistrelle	<i>Pipistrellus pipistrellus</i>	Jul-07	dung/droppings/frass /pellet, etc.		Sch5; WYBAP; Kirklees BAP
SE05841255	Pipistrelle	<i>Pipistrellus pipistrellus</i>	Jul-07	dung/droppings/frass /pellet, etc.		Sch5; WYBAP; Kirklees BAP
SE06031473	Pipistrelle	<i>Pipistrellus pipistrellus</i>	24/09/2013	Roost	6 Count	Sch5; WYBAP; Kirklees BAP
SE0614	Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	01/11/2008	aural bat detector		Sch5; WYBAP; Kirklees BAP
SE067144	Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	23/07/2005	aural bat detector	3 Count of Individual	Sch5; WYBAP; Kirklees BAP

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE0712	Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	01/11/2008	aural bat detector		Sch5; WYBAP; Kirklees BAP
SE0713	Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	01/11/2008	aural bat detector		Sch5; WYBAP; Kirklees BAP
SE072142	Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	23/07/2005	aural bat detector	> 10 Count of Individual	Sch5; WYBAP; Kirklees BAP
SE073141	Pipistrelle	<i>Pipistrellus pipistrellus</i>	March 1999 - December 1999	field record		Sch5; WYBAP; Kirklees BAP
SE0811714603	Pipistrelle	<i>Pipistrellus pipistrellus</i>	31/07/2008	Roost	5 Count	Sch5; WYBAP; Kirklees BAP
SE0840014200	Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	31/07/2008	Roost		Sch5; WYBAP; Kirklees BAP
SE084142	Pipistrelle	<i>Pipistrellus pipistrellus</i>	19/06/2008 - 21/07/2008	field record	2 Count of Roost	Sch5; WYBAP; Kirklees BAP
SE0846014220	Pipistrelle	<i>Pipistrellus pipistrellus</i>	19/06/2008 - 21/07/2008	field record	3 Count of Adult	Sch5; WYBAP; Kirklees BAP
SE0914	Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	01/11/2008	aural bat detector		Sch5; WYBAP; Kirklees BAP
SE058124	Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	16/07/2007	aural bat detector		Sch5; UKBAP; WYBAP; Kirklees BAP
SE065144	Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	23/07/2005	aural bat detector	1 Count of Individual	Sch5; UKBAP; WYBAP; Kirklees BAP
SE0712	Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	01/11/2008	aural bat detector		Sch5; UKBAP; WYBAP; Kirklees BAP
SE0914	Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	01/11/2008	aural bat detector		Sch5; UKBAP; WYBAP; Kirklees BAP
SE0829414430	Pipistrelle Bat species	<i>Pipistrellus sp.</i>	14/07/2006	Roost	150 Count of Adult	Sch5
SE05811249	Brown Long-Eared Bat	<i>Plecotus auritus</i>	Unknown	dung/droppings/frass /pellet, etc.		Sch5; UKBAP; WYBAP; Kirklees BAP
SE0584012530	Brown Long-eared Bat	<i>Plecotus auritus</i>	16/07/2007	Roost		Sch5; UKBAP; WYBAP; Kirklees BAP
SE05841253	Brown Long-Eared Bat	<i>Plecotus auritus</i>	Jul-07	dung/droppings/frass /pellet, etc.		Sch5; UKBAP; WYBAP; Kirklees BAP
SE05841255	Brown Long-Eared Bat	<i>Plecotus auritus</i>	Jul-07	dung/droppings/frass /pellet, etc.		Sch5; UKBAP; WYBAP; Kirklees BAP
SE0712	Brown Long-eared Bat	<i>Plecotus auritus</i>	01/11/2008	aural bat detector		Sch5; UKBAP; WYBAP; Kirklees BAP

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE0914	Brown Long-eared Bat	<i>Plecotus auritus</i>	01/11/2008	aural bat detector		Sch5; UKBAP; WYBAP; Kirklees BAP
SE065144	Grey Squirrel	<i>Sciurus carolinensis</i>	11/06/1997	field record	1 Count of Individual	Sch9_part1
SE070142	Grey Squirrel	<i>Sciurus carolinensis</i>	1999	field record		Sch9_part1
SE05791249	Bats	<i>Vespertilionidae</i>	Jul-07	dung/droppings/frass /pellet, etc.		Sch5
SE05801251	Bats	<i>Vespertilionidae</i>	Jul-07	dung/droppings/frass /pellet, etc.		Sch5
SE0585214618	Bats	<i>Vespertilionidae</i>	May-14	Roost	45 Count of Present	Sch5
SE0689413445	Bats	<i>Vespertilionidae</i>	12/03/2011	droppings		Sch5
SE0692213440	Bats	<i>Vespertilionidae</i>	12/02/2012	Roost (hibernacula)		Sch5
SE0702213478	Bats	<i>Vespertilionidae</i>	07/03/2010	Roost (hibernacula)		Sch5
SE0712	Vesper Bat species	<i>Vespertilionidae</i>	01/11/2008	aural bat detector		Sch5
SE07651395	Vesper Bat species	<i>Vespertilionidae</i>	23/05/2000	field record		Sch5
SE0897514358	Bats	<i>Vespertilionidae</i>	12/02/2012	Roost (hibernacula)		Sch5
SE0897514358	Bats	<i>Vespertilionidae</i>	12/03/2011	Roost (hibernacula)		Sch5
SE0898314338	Bats	<i>Vespertilionidae</i>	12/03/2011	Roost (hibernacula)		Sch5
SE0898414367	Bats	<i>Vespertilionidae</i>	12/02/2012	Roost (hibernacula)		Sch5
SE0898414367	Bats	<i>Vespertilionidae</i>	12/03/2011	Roost (hibernacula)		Sch5
SE0899614341	Bats	<i>Vespertilionidae</i>	12/03/2011	Roost (hibernacula)		Sch5
SE0914	Vesper Bat species	<i>Vespertilionidae</i>	01/11/2008	aural bat detector		Sch5

2.1 SENSITIVE SPECIES RECORDS

2.1.1 Badgers

There is no known badger activity in this area.

3 Designated sites

3.1 INTERNATIONALLY DESIGNATED SITE

3.1.1 Special Protection Areas

There are no Special Protection Areas within your search area.

3.1.2 Special Areas of Conservation

There are no Special Areas of Conservation within your search area.

3.2 NATIONALLY DESIGNATED SITES

3.2.1 Sites of Special Scientific Interest

There are no Sites of Special Scientific Interest within the search area.

3.3 LOCALLY DESIGNATED SITES

3.3.1 Sites of Scientific Interest

'Sites of Scientific Interest' (SSI) are areas identified by the relevant local authority as being important for their flora and fauna. They are of county wide importance. Sites recorded include:

- Drop Clough
- Huddersfield Narrow Canal

Citations for SSIs are provided in Appendix B.

3.3.2 Local Nature Reserves

There are no Local Nature Reserves (LNR) within your search area.

3.3.3 Local Wildlife Sites

West Yorkshire is currently going through a process of merging 2nd and 3rd tier local sites into a single Local Wildlife Site (LWS) designation. Sites should be given the same protection as SSIs, as set out in UDPs/LDFs.

There are no Local Wildlife Sites (LWS) within your search area.

3.3.4 Kirklees – Sites of Wildlife Significance

Kirklees – Sites of Wildlife Significance (SWS) are sites of local or district-wide importance for the enjoyment, study or conservation of wildlife, geological features and landforms, but there is seldom detailed ecological information on record for them. Sites recorded include:

- Clough House Lane Pond

Wildlife Habitat Network data for Kirklees can be found on the link below:
<http://www.kirklees.gov.uk/business/regeneration/udp/UDP.aspx>

“D6 – Green corridor” download Proposals Maps (Bottom of webpage)

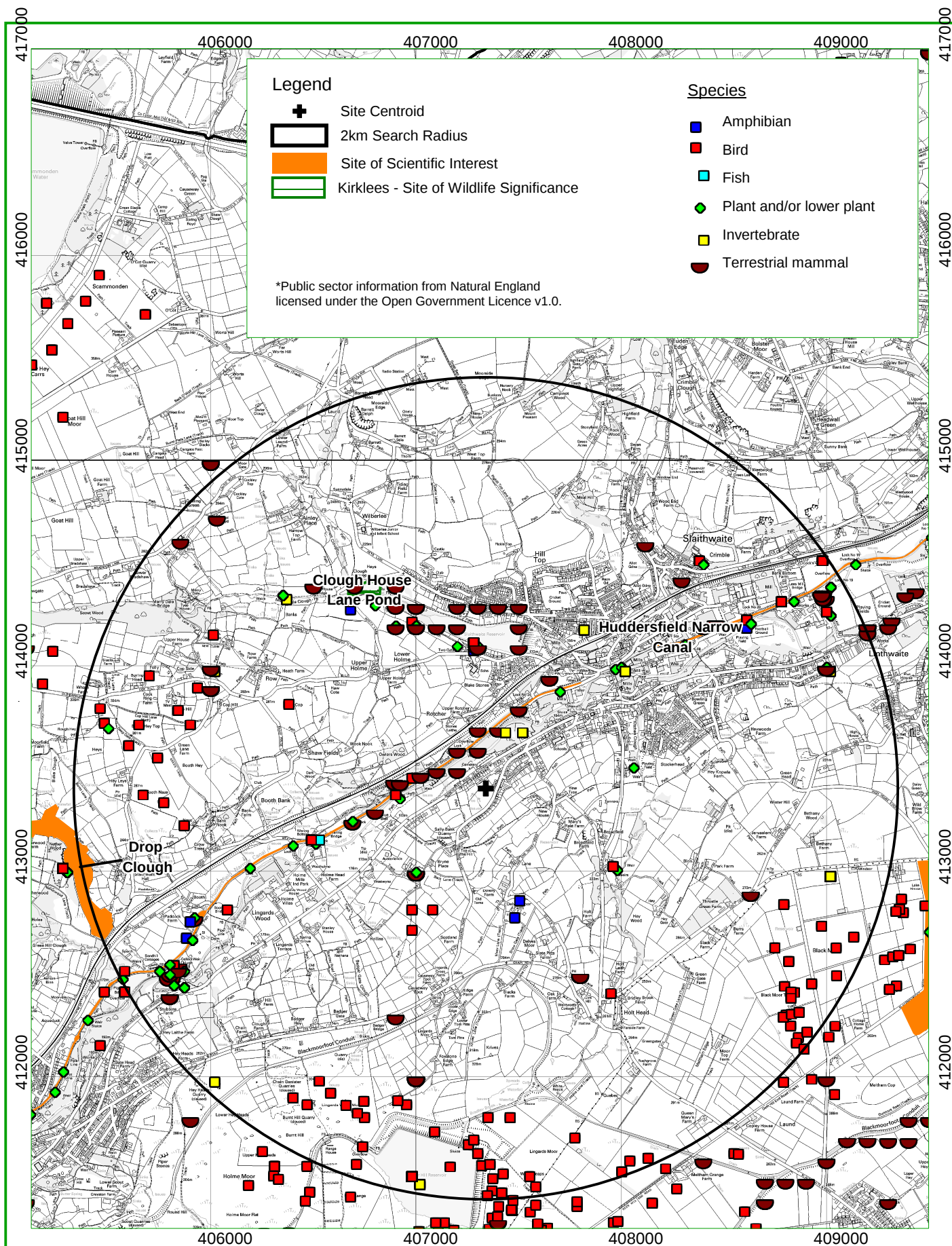
“3 the natural environment” download pdf page 7

NE5 development proposals involving land identified on the proposals map as part of a wildlife corridor should make provision for the retention of the corridor and the protection of the wildlife value of the land.

3.3.5 Local Geological Sites

There are no Local Geological Sites (Regionally Important Geological Site (RIGS)) within your search area.

Figure 1 – Species and Designated Sites



Unauthorised reproduction infringes Crown copyright. Copying, sub-licensing, distribution, sale or any other use is strictly prohibited by any third party. Reproduced from the Ordnance Survey digital mapping with the permission of Ordnance Survey on behalf of Her Majesty's Stationary Office. (c) Crown copyright. OS Licence number: WMDC100019574.

metres

0 500 1000



Scale 1: 25000
At Size A4



West Yorkshire
Ecology

West Yorkshire Joint Services

FIGURE 1: SPECIES & DESIGNATED SITES

Page: 24

4 Habitats

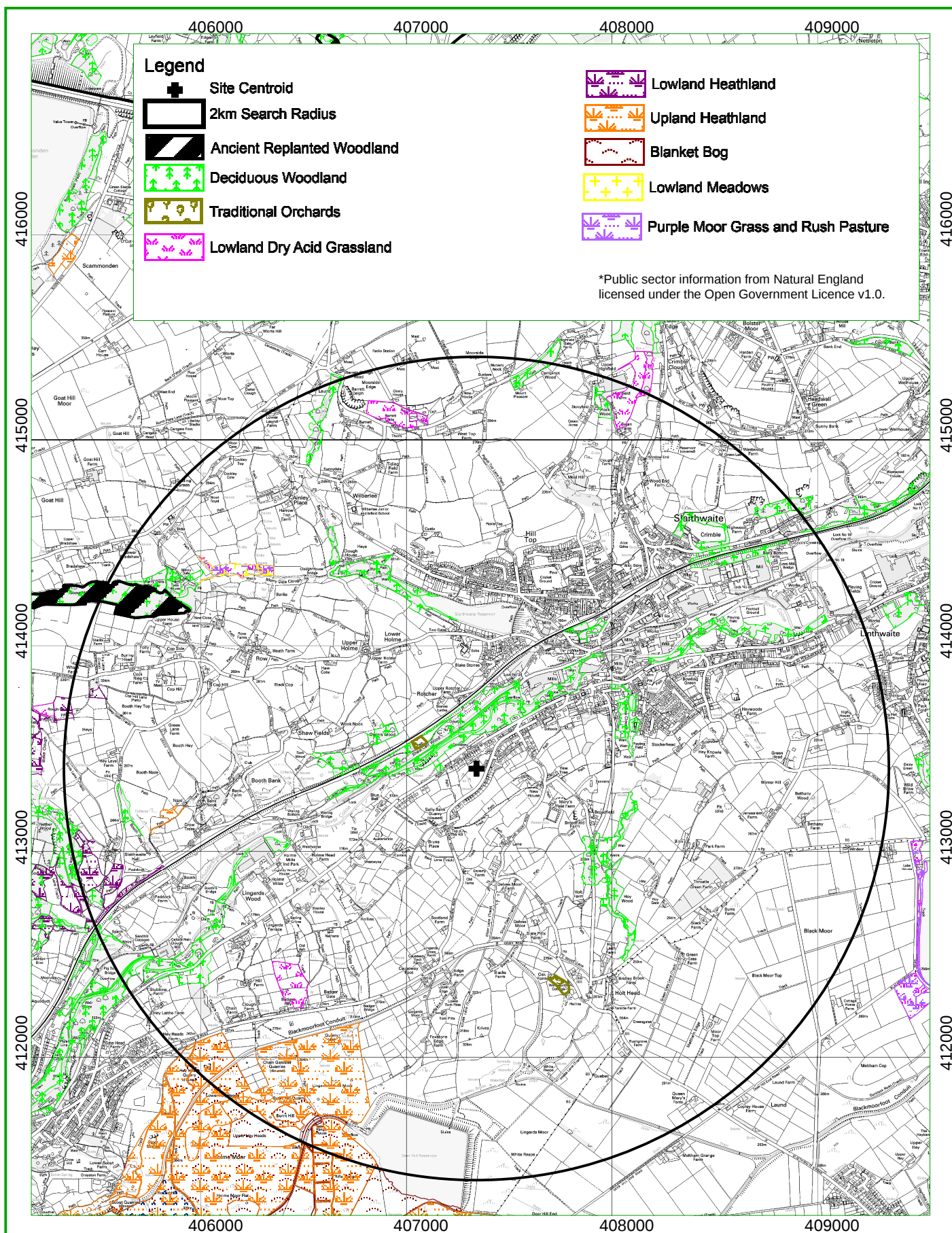
4.1 UK PRIORITY HABITATS

Natural England (English Nature) creates, maintains and publishes priority habitat inventories across the UK. These have been reproduced on Figure 2 with permission from Natural England. The terms of use for Natural England's Information and Data can be found at the following web site: <http://www.naturalengland.org.uk/copyright/>.

The habitats identified within the search area are:

- Ancient Replanted Woodland
- Deciduous Woodland
- Traditional Orchards
- Lowland Dry Acid Grassland
- Lowland Heathland
- Upland Heathland
- Blanket Bog
- Lowland Meadows
- Purple Moor Grass and Rush Pasture

Figure 2 – UK Priority Habitats



Unauthorised reproduction infringes Crown copyright. Copying, sub-licensing, distribution, sale or any other use is strictly prohibited by any third party. Reproduced from the Ordnance Survey digital mapping with the permission of Ordnance Survey on behalf of Her Majesty's Stationery Office. (c) Crown copyright. OS Licence number: WMDC100019574.

metres
0 500 1000



Scale 1: 25000
At Size A4



West Yorkshire
Ecology

West Yorkshire Joint Services

**FIGURE 2:
UK
PRIORITY
HABITATS**

Page: 26

Appendix A. Explanation of Species Designations

Wildlife and Countryside Act 1981 – main designations cited

Abbreviation	Full Name	Description	Offences include, but not limited to
Sch1_part1	Schedule 1, Part 1	Birds which are protected by special penalties at all times	- disturb any specially protected bird while it is building its nest; - disturb any specially protected bird while it is near a nest containing eggs or young; or - disturb the young of any of these birds before they are wholly independent.
Sch1_part2	Schedule 1, Part 2	Birds which are protected by special penalties during the close season	
Sch5	Schedule 5	Animals which are protected	- intentional or reckless killing, injuring, taking; - damage to, destruction of, obstruction of access to any structure or place used by a scheduled animal for shelter or protection; and - disturbance of animal occupying such a structure or place.
Sch5_sect9.1	Schedule 5, Section 9(1)	Animals which are protected from killing and/or taking	intentional killing, injuring and/or taking NB: certain species are only partly protected by this section. Check primary legislation for details.
Sch5_sect9.5	Schedule 5, Section 9(5)	Animals which are protected from sale	- selling, offering for sale, possessing or transporting for the purpose of sale (live or dead animal, part or derivative); and - advertising for buying or selling such things
Sch8	Schedule 8	Plants which are fully protected	pick, uproot, trade in, or possess (for the purposes of trade).
Sch8_sect 13.2 (sale only)	Schedule 8, Sections 13(2a+2b)	Plants which are protected from sale only	selling, offering for sale, possessing or transporting for the purpose of sale, any plant (live or dead, part or derivative) + advertising for buying or selling such things
Sch9_part1	Schedule 9, Part 1	Animals which are established in the wild.	- the release of animals and planting of plants listed in Schedule 9. - the above offences can be made legal through the granting of licences by the appropriate authorities. NB: <i>Tyto alba</i> refers to captive bred only.
Sch9_part2	Schedule 9, Part 2	Plants which are established in the wild.	

Biodiversity Action Plans

Abbreviation	Full Name
UKBAP	UK Biodiversity Action Plan
WYBAP	West Yorkshire Priority Species List
Bradford BAP	Bradford Biodiversity Action Plan
Calderdale BAP	Calderdale Biodiversity Action Plan
Kirklees BAP	Kirklees Biodiversity Action Plan
Leeds BAP	Leeds Biodiversity Action Plan
Wakefield BAP	Wakefield Biodiversity Action Plan

Birds of Conservation Concern (BOCC) 2009

List	Description
Red	High conservation concern
Amber	Medium conservation concern

Red Data Book Categories (Based on ICUN Guidelines)

Abbreviation	Full Name
EX	Extinct
EW	Extinct in the Wild
CR	Critically Endangered
VU	Vulnerable
NT	Near Threatened
LC	Least Concern
DD	Data Deficient
NE	Not Evaluated

Nationally Notable Invertebrates:

Abbreviation	Full Name	Description
NR	Nationally Rare	found in 15 or fewer hectads
Notable or NS	Nationally Notable or Nationally Scarce	found in between 16 and 100 hectads
Notable A	Nationally Notable A	found in 16 to 30 hectads
Notable B	Nationally Notable B	found in between 31 and 100 hectads

References

Biodiversity Reporting and Information Group, (2007) *Report on the Species and Habitat Review*, UK Biodiversity Partnership. <http://www.ukbap.org.uk/>.

Bratton, J.H. (ed), (1991) *British Red Data Books: 3. Invertebrates other than insects*. JNCC, Peterborough.

BTO, et al (2009) *The Birds of Conservation Concern 3*. British Trust for Ornithology. <http://www.bto.org/psob/index.htm>.

Calderdale Biodiversity Action Plan Technical Group (2008) *Calderdale Local Biodiversity Plan: Review of Species and habitats*, Calderdale Biodiversity Action Plan Technical Group, Calderdale.

Cheffings, C. and Farrell, L. (Editors), (2005) *The Vascular Plant Red Data List for Great Britain*, ISSN 1473-0154.

City of Bradford MDC, (2003), *A Local Biodiversity Action Plan for the Bradford District (Draft)*, City of Bradford MDC, Bradford.

IUCN, (2004) *Guidelines for using the IUCN. Red List categories and criteria*. IUCN,. Gland and Cambridge

J. C. Lavin & G.T.D. Wilmore (1994) , *The West Yorkshire Plant Atlas*, City of Bradford Metropolitan Council, Bradford.

Kirklees Metropolitan Council (2008) *Kirklees Biodiversity Action Plan*, Kirklees Metropolitan Council, Kirklees.

Leeds BAP Steering Group, (2000) *Biodiversity Action Plan For Leeds*, Leeds City Council, Leeds.

Shirt, D. B. (Ed.), (1987) *British Red Data Books : 2 : Insects*. Peterborough: NCC.

Wakefield Biodiversity Group, (2001) *Wakefield District Local Biodiversity Report*, Wakefield MDC, Wakefield.

West Yorkshire Biodiversity Action Partnership (2009), *West Yorkshire Priority Species List*, West Yorkshire Ecology, Wakefield.

Appendix B. Designated Site Citations

west yorkshire
E C O L O G Y



Site Name: Drop Clough

Date of Survey: 12 July 2001

Grid Reference: SE 053130

Planning Authority: Kirklees M C

Natural Area: Southern Pennines

Location: north of Marsden

Surveyor: J North

1:10 000 Map: SE 01 SE

Area: 11.5 Ha

NVC Types Present: W7b, W10a, W10e, W16a, W16b, U4b, U20, H9c, H 9, H12, M25a

Keywords: Broadleaved semi-natural woodland; Acid grassland; Acid dry heath, Mire

Protected Species: No

Ancient Woodland: No

RIGS: No



Site Description

Drop Clough is a narrow steep sided clough woodland centred on the stream of Drop Clough and fringed by acidic heathy grassland which eventually grades into the surrounding moorland. The clough rises steeply from its southern end although the main track follows the stream.

The clough woodland is well developed and comprises birch, *Betula pendula* and *B. pubescens*, sessile oak, *Quercus petraea*, goat willow, *Salix caprea* and rowan, *Sorbus aucuparia* with sporadic hawthorn, *Crataegus monogyna*, holly, *Ilex aquifolium*, elder, *Sambucus nigra* and alder, *Alnus glutinosa*. There is good regeneration especially of oak and birch.

The steep slopes show a transition from woodland through acid grassland and acidic rough pasture to heath, with frequent wavy hair grass, *Deschampsia flexuosa*, mat grass, *Nardus stricta*, and bilberry, *Vaccinium myrtillus* with some broom, *Cytisus scoparius* and purple moor grass, *Molinia caerulea*. Patches of heather, *Calluna vulgaris* are frequent as are extensive areas of bracken, *Pteridium aquilinum*. The clough eventually grades out into *Molinia* dominated moorland where cranberry, *Vaccinium oxycoccos*, cotton grass, *Eriophorum angustifolium*, bog asphodel, *Narthecium ossifragum* cross leaved heath, *Erica tetralix*, and *Sphagnum* spp. occur in a mire community.

The stream side area has a diverse pteridophyte flora, including bracken, broad buckler fern, *Dryopteris dilatata*, hard fern, *Blechnum spicant* and lady fern, *Athyrium filix-femina*. The herb layer is also diverse with wood horsetail, *Equisetum sylvaticum*, marsh violet, *Viola palustris*, meadowsweet, *Filipendula ulmaria*, marsh thistle, *Cirsium palustre*, smooth-stalked sedge, *Carex leavigata*, remote sedge, *Carex remota*, *Juncus* spp and *Sphagnum* spp.

NVC

The main woodland community present is W10, mostly W10e, with a canopy of *Quercus petraea* and *Betula pendula* and occasional *Quercus robur* with *Sorbus aucuparia*, *Lonicera periclymenum* and *Ilex aquifolium* in the shrub layer. The herb layer is dominated by *Holcus mollis* with *Pteridium aquilinum*, *Rubus fruticosus* agg., *Deschampsia flexuosa*, *Agrostis capillaris* and *Digitalis purpurea*.

The steeper clough sides are more typical of the W16 community with the canopy dominated by *Betula pendula* and *Betula pubescens* with scattered *Quercus petraea* and *Sorbus aucuparia*. The herb layer consists of abundant *Deschampsia flexuosa* with *Agrostis capillaris*, *Molinia caerulea*, *Potentilla erecta*, *Festuca rubra*, *Vaccinium myrtillus* and *Blechnum spicant*. This community grades into the open moorland .

An area of wet woodland is adjacent to the stream. This is dominated by *Salix* species including *Salix caprea* and *S. cinerea* with *Betula pendula* and *B. pubescens* with some scattered *Alnus glutinosa*. The herb layer here is very diverse. This community has similarities with the W7 wet woodland community.

The mires are species poor *Molinia caerulea* dominated communities with *Calluna vulgaris*, *Vaccinium myrtillus* and *Deschampsia flexuosa* with infrequent *Vaccinium oxycoccos* and locally frequent *Sphagnum* and *Narthecium ossifragum*, indicating a M25 community.

The drier, better drained slopes hold heath communities, one dominated by *Calluna vulgaris* and *Vaccinium myrtillus* with *Deschampsia flexuosa* and *Pteridium aquilinum* and frequent mosses, indicating a H12 heath, the other a more open *Calluna* dominated area with abundant *Deschampsia flexuosa* and scattered *Nardus stricta*, *Molinia caerulea* and *Vaccinium myrtillus* typical of the H9 community.

There are some extensive areas of *Pteridium aquilinum*, indicating a U20 community and areas of acidic *Deschampsia flexuosa* dominated U2 grassland.

west yorkshire E C O L O G Y



Ecological Evaluation

Drop Clough is a good example of a Pennine clough and shows transition from wet woodland, through upland woodland to moorland, mire and upland acidic grassland in a relatively short distance. Natural regeneration in the woodland is good and the wet woodland streamside area shows good herb and pteridophyte diversity.

Site Management

The woodland appears to be unmanaged at the present and the heathland ungrazed. The heathland areas would benefit from grazing. In addition removal of some of the *Fagus sylvatica* would let more light in and encourage a more diverse herb layer in places.

west yorkshire
E C O L O G Y



Site Name: Huddersfield Narrow Canal

Location: Tunnel End, Marsden to Aspley Basin

Date of Survey: 13 September 2002

Surveyor: J North

Grid Reference: SE 041119 to SE 149164

1:10 000 Map: SE 01 AND SE 11

Planning Authority: Kirklees M C

Area: 12.7 Km

Natural Area: Southern Pennines/Coal Measures

NVC Types Present: A2b, A5b, A10, A15, A16, S5a, S10a, S12a, S15a, S22,

Keywords: Standing water; Swamp; Marginal vegetation.

Protected Species: Yes



Site Description

The section of the Huddersfield Narrow Canal which is included within this site stretches from the entrance of the Standedge Tunnel at Marsden, to Aspley Basin in the centre of Huddersfield, where it joins the Sir John Ramsden Canal. The canal lies in close proximity to the River Colne. The canal is navigable having been opened to boat traffic in 2001, some vegetation cover has been lost due to engineering work.

Submerged vegetation is dominated by the A15 Canadian pondweed, *Elodea canadensis* NVC community. This is often the only species present with occasional duckweed, *Lemna minor* and starwort, *Callitriche* spp. In the more northerly sections species such as small pondweed, *Potamogeton berchtoldii*, curled pondweed, *P. crispus* and curly waterweed, *Lagarosiphon major* also occur. The only other submerged community is a small area of the A5b rigid hornwort, *Ceratophyllum demersum* community with *Elodea canadensis*, *Lemna minor* and *Callitriche* spp.

Floating aquatic communities are dominated, in the northern section, by the A2 *Lemna minor* community which forms dense mats over the full width of the canal. The only other aquatic community is A10, characterised by a raft of amphibious bistort, *Persicaria amphibia*. There is also a small area of fringed water lily, *Nymphoides peltata* with white water lily, *Nymphaea alba* in one stretch of the canal, close to West Wood, but this does not readily fit any NVC type. The other aquatic species of note found within some sections of the canal is floating water plantain, *Luronium natans*. This is a nationally rare species which has both national and international protection.

Emergent/swamp vegetation is very varied, the southern sections support a number of stands of the S10a water horsetail, *Equisetum fluviatile* community with, on the shallower margins, a mixed community of dominant reed canary-grass, *Phalaris arundinacea* with soft rush, *Juncus effusus*, marsh bedstraw, *Galium palustre*, nettle, *Urtica dioica*, hemlock water dropwort, *Oenanthe crocata*, yellow flag, *Iris pseudacorus* and water cress, *Rorippa nasturtium-aquaticum*.

Further north, there are areas of bulrush, *Typha latifolia* with water plantain, *Alisma plantago-aquatica*, bittersweet, *Solanum dulcamara* and *Lemna minor*. This is an example of S12a .

The other tall swamp community present is S15 with abundant sweet flag, *Acorus calamus*.. In some shallow areas floating sweet-grass, *Glyceria fluitans* with *Alisma plantago-aquatica*, water forget-me-not, *Myosotis scorpioides* and *Solanum dulcamara* occur representing the S22 community. Other more varied vegetation occurring at the margins includes *Alisma plantago-aquaticum*, remote sedge, *Carex remota*, gipsywort, *Lycopus europaeus*, marsh woundwort, *Stachys palustris*, brooklime, *Veronica beccabunga*, and celery-leaved buttercup, *ranunculus sceleratus*.

These swamp communities are scarce and appear to have been affected by the work to reopen the canal.

In terms of faunal communities, historical records show that the canal supports a typical range of water fowl and coarse fish. Of particular interest along the canal is the range of aquatic invertebrates, which include the regionally uncommon freshwater sponge. In addition, information is held regarding molluscan fauna, which have revealed in the past that the canal supports two nationally scarce species of freshwater mussel.



Ecological Evaluation

The Huddersfield Narrow Canal supports a representative range of aquatic and emergent communities which contain a diverse range of species including regionally uncommon species such as *Ceratophyllum demersum*, *Nymphoides peltata* and the nationally rare *Luronium natans*.

This latter species is only found in the canal systems of N. Wales, Cheshire, Lancashire and W. Yorkshire. It is a protected species under Schedule 8 of the Wildlife and Countryside Act 1981, and more importantly it is listed in Annexe 1 of the Berne Convention for Nature Conservation. This means that each Council of Europe member state has an obligation to protect both the species and its habitat.

Site Management

There is a well maintained towpath along the length of the canal. The southern half of the canal up to its culverting at Slaithwaite has been dredged and is navigable. The northern half is un-navigable. British Waterways Board have drawn up plans to restore the whole canal and providing the important species are safeguarded, then this will be of great overall benefit.