



Site: Croft Street, Birkenshaw

Survey: Extended Phase 1 Habitat Survey

Client: Atkin Enterprises Ltd

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1 Introduction

1.1 Background to Development

1.1.1 Atkin Enterprises Ltd propose to construct a residential development on a plot of land adjacent to Birkenshaw Liberal Club. The land is located off Croft Street in Birkenshaw, West Yorkshire, at Ordnance Survey grid reference SE 2037 2844 (see Figure 1; hereby referred to as 'the site'). The site was previously used for allotments but since the 1970s has been abandoned, allowing it to scrub over.

1.1.2 The current proposals include the construction of 40 residential dwellings and a block of 6 flats, together with the associated infrastructure, car parking and gardens. The proposals (hereby referred to as 'the proposed development') are provided within Appendix 1.

1.1.3 This report includes the survey methodologies undertaken (included as Appendix 2), the results, impacts, relevant legislation, and any mitigation or further surveys required to enable to project to comply with current European/UK legislation and policies.

1.2 Objectives and Agreed Brief

1.2.1 BL Ecology was commissioned on 11th March 2014 to undertake an initial ecological assessment of the site to determine the potential impacts of the proposed development. The agreed brief was to:

- Undertake a desk study with West Yorkshire Ecology to ascertain protected species and nature conservation sites known within 1km of the site;
- Complete a Phase 1 habitat survey of the areas likely to be affected by works;
- Assess the habitat suitability for protected and BAP species; and
- Submit a report with associated mapping, outlining the likely mitigation for the site including the need for additional surveys.

2 Results

2.1 Desk Study

- 2.1.1 A response was received from West Yorkshire Ecology on 24th March 2014 of records for all designated sites and ecologically important habitats/species within 2km of the site, referred to as the 'study area'. A summary of the results is provided in the following paragraphs, with the full details provided in Appendix 3.

Sites of Nature Conservation Interest

- 2.1.2 There are no internationally or nationally designated sites for nature conservation interest within the study area. However, three locally designed sites are present within the study area, including:

- Tong Moor – an LNR and a Kirklees Site of Wildlife Significance (SWS) located 0.8km to the north;
- Oakwell Park – a Local Nature Reserve (LNR) located 1.5km to the south-east of the site; and
- Park Wood, Tong – a Bradford Wildlife Area (BWA) located 1.8km to the north-east.

- 2.1.3 The locations of local wildlife sites are shown in Appendix 3.

Protected Species

- 2.1.4 The desk study revealed the following protected species records, which are shown on Figure 2:

- 3 amphibian records consisting of common toad (*Bufo bufo*), common frog (*Rana temporaria*) and smooth newt (*Lissotriton vulgaris*). All three records are located within Oakwell Park 1.7km to the south-east of the site;
- 27 species of birds, including brambling (*Fringilla montifringilla*), redwing (*Turdus iliacus*), and fieldfare (*Turdus pilaris*);
- 6 plant species, including bluebell (*Hyacinthoides non-scripta*), Japanese knotweed (*Fallopia japonica*) and Himalayan balsam (*Impatiens glandulifera*). The nearest record is Japanese knotweed located 0.6km to the north, the remaining records are all located within Oakwell Park 1.7km to the south-east of the site;
- 1 beetle record, 2 butterfly records, and 2 moth records, all located within Oakwell Park 1.7km to the south-east of the site; and
- 9 mammal records, including 4 bat species of Leisler's (*Nyctalus leisleri*), noctule (*Nyctalus noctula*), common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*), together with hedgehogs (*Erinaceus europaeus*), and brown hares (*Lepus europaeus*). The nearest mammal records are a Leisler's roost dating from 2006 located 0.4km to the south-west of the site and an unknown bat species found in a building 0.5km to the north of the site in 1996.
- Numerous badger records have been identified within the 2km search area, however none are known within 0.5km of the site; these records have not been included within Appendix 3 due to the sensitive nature of badger records.

2.2 Phase 1 Habitat Survey

- 2.2.1 Habitats found during the Phase 1 Habitat Survey are shown on Figure 2. All are common habitats found across the UK, with no rare flora or communities recorded during the survey. The following paragraphs describe the habitats on site which are illustrated within the photographs of Figure 3. A full species list is provided within Appendix 4.
- 2.2.2 *Tall ruderal*: The majority of the site (approximately 0.37ha) comprises tall ruderal vegetation. In open areas the tall ruderal consists predominantly of common nettle (*Urtica dioica*) with occasional rosebay willowherb (*Chamerion angustifolium*), broadleaved dock (*Rumex obtusifolius*), cleavers (*Galium aparine*), creeping thistle (*Cirsium arvense*) and locally dominant ground elder (*Aegopodium podagraria*); this habitat is succeeding to scrub habitat throughout the site by the invasion of bramble (*Rubus fruticosus* agg.). Where the tall ruderal is shaded by tree cover species also include ivy (*Hedera helix*), wood avens (*Geum urbanum*), common hogweed (*Heracleum sphondylium*), bracken (*Pteridium aquilinum*) and an increase in scrub species including holly (*Ilex aquifolium*), ash saplings (*Fraxinus excelsior*), elder (*Sambucus nigra*), and holly (*Ilex aquifolium*).
- 2.2.3 *Dense scrub*: Approximately 0.37ha of the site comprises dense scrub, including predominantly bramble, with occasional common nettle, broadleaved dock, rosebay willowherb and a small patch of honeysuckle (*Lonicera periclymenum*).
- 2.2.4 *Semi-natural broad-leaved woodland and scattered broad-leaved trees*: Broadleaved trees are scattered throughout the site, however where the density of trees has produced a shaded ground flora typical of woodland these areas (0.05ha) have been classed as semi-natural broad-leaved woodland. Tree species throughout the site include sycamore (*Acer pseudoplatanus*), ash, goat willow (*Salix caprea*), wych elm (*Ulmus glabra*), hawthorn (*Crataegus monogyna*), cherry sp. (*Prunus* sp.), elder, and oval-leaved privet (*Ligustrum ovalifolium*). The ground flora in the woodland areas comprises predominantly ivy, with frequent bramble and common nettle, and occasional gooseberry (*Ribes uva-crispa*).
- 2.2.5 *Semi-improved neutral grassland*: An area of 0.093ha comprises semi-improved neutral grassland, which is predominantly present bordering a pathway and the access road in the east of the site. Species include cock's-foot (*Dactylis glomerata*), Yorkshire fog (*Holcus lanatus*), creeping bent (*Agrostis stolonifera*), meadow foxtail (*Alopecurus pratensis*), smooth meadow grass (*Poa pratensis*), perennial rye-grass (*Lolium perenne*), common nettle, dandelion (*Taraxacum officinale*), and locally dominant creeping buttercup (*Ranunculus repens*).
- 2.2.6 *Amenity grassland*: A small patch (0.019ha) of mown amenity grassland is present on the southern boundary of the Social Club and forms the beer garden. Species include Yorkshire fog, dandelion, creeping buttercup, white clover (*Trifolium repens*), common ragwort (*Senecio jacobaea*), groundsel (*Senecio vulgaris*) and spear thistle (*Cirsium vulgare*).
- 2.2.7 Rhododendron (*Rhododendron ponticum*) was identified in two small stands underneath trees to the north of the access track in the east of the site, this species is listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). No other species listed on this Schedule were identified on site; due to the lack of any obvious dead stands of Schedule 9 species it is considered unlikely that the site supports any significant stands, however the survey was undertaken during a sub-optimal period for vegetation surveys and cutting can make stems difficult to locate in winter. Future invasive plants cannot be ruled out.

2.3 Habitat Assessment for Faunal Species

2.3.1 The following paragraphs provide site-specific descriptions for each species.

Badger

2.3.2 No signs of badger presence were found during the survey. The site contains habitats suitable for sett creation and foraging, however the urban nature of the surrounding habitat means that badger presence is unlikely. Badger records were identified within the vicinity through the desk study, however no suitable habitat connects these records to the site.

Bats

2.3.3 No buildings are present within the site boundary and all trees were considered to hold negligible potential for bat roosts. The site could offer suitable foraging habitat for bats roosting within adjacent buildings, however, given the close locality of open countryside within 100m of the site is unlikely to form an important foraging area.

Breeding Birds

2.3.4 The site comprises suitable breeding habitat for passerines, predominantly within the scrub and trees. It is considered unlikely that the birds listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) identified through the desk study would utilise the site due to the lack of berry-producing species.

Great Crested Newts

2.3.5 There are no ponds on site and no ponds have been identified within 500m of the site. No records of this species were identified during the desk study and it is therefore considered that this species is absent from the site.

Otters, Water Voles and White-Clawed Crayfish

2.3.6 There are no ponds or watercourses on site, the nearest watercourse is Lodge Beck located 250m to the south but it is not connected to the site via suitable habitat. The habitats on site do not provide suitable terrestrial habitat for any of these species and therefore it is considered that these species are absent from the site

Reptiles

2.3.7 The habitats on site provide limited potential for reptiles. Areas of short grassland and bare ground could provide basking habitat for this group, however it is considered that the dense cover provided by bramble and trees is unlikely to be suitable. The urban land-use immediately surrounding the site isolates the site from other suitable habitat, and furthermore no reptile records were identified from the desk study. It is therefore considered that this group is absent from the site.

Brown Hares and Hedgehogs

2.3.8 These species have both been identified in the desk study (see Section 2.1.4 above) as being within the vicinity of the site. The site provides suitable foraging habitat for hedgehogs although the habitats are considered unsuitable for brown hares due to the dense scrub cover and disturbance from dog-walkers.

3 Impacts and Legislation

3.1 Impacts

3.1.1 The predicted impacts of the proposed development are described in Table 2 below and are based on the proposals plan within Appendix 1.

Receptor	Impact	Legislation (if relevant)
Non-Statutory Nature Conservation Sites		
Tong Moor LNR and SWS	No anticipated impact to any of the local wildlife sites due to their distance from the site, the nearest being 0.8km away. The site does not form part a corridor of similar habitats to any of these protected sites	N/A
Oakwell Park LNR		
Park Wood BWA		
Habitats (within the development area and surrounding)		
Tall ruderal	Permanent loss of all tall ruderal on site. This is a common habitat found throughout the UK. No HAP have been formulated within the UK BAP or Kirklees BAP for this habitat type	N /A
Dense scrub	Permanent loss of all dense scrub on site. This is a common habitat found throughout the UK. No HAP have been formulated within the UK BAP or Kirklees BAP for this habitat type	N /A
Semi-natural broad-leaved woodland and scattered broad-leaved trees	Likely permanent loss of all trees on site. This is a common habitat found throughout the UK; neither of these habitats qualify for BAP status under the UK or Kirklees BAP	N /A
Semi-improved neutral grassland	Permanent loss of all semi-improved neutral grassland on site. This is a common habitat found throughout the UK. No HAP have been formulated within the UK BAP or Kirklees BAP for this habitat type	N /A
Amenity grassland	Permanent loss of all amenity grassland on site. This is a common habitat found throughout the UK. No HAP have been formulated within the UK BAP or Kirklees BAP for this habitat type	N /A
Invasive non-native species	Likely loss of the rhododendron	Schedule 9 WCA
Faunal Species		
Badger	No anticipated impact as no signs of badger presence have been found on the site. There will be no impact to dispersing/commuting badgers as the site does not form a corridor between areas of suitable badger habitat	Protection of Badgers Act 1992
Bats	Foraging bats could be disturbed in the short-term during the construction phase if night working is undertaken, and in the long-term due to lighting on the new layout if lighting extends past the boundaries of the site; lighting could potentially disturb bats roosting within adjacent buildings	Habitat Regs 2012 WCA 1981
Birds	Destruction/damage to nests and hence killing/injury of birds during removal of vegetation	WCA 1981
	Permanent loss of habitat for foraging and breeding	
	Disturbance during the construction phase and during operation	
Otter	No anticipated impact	N/A
Reptiles	No anticipated impact	N/A
Water vole	No anticipated impact	N/A
White-clawed crayfish	No anticipated impact	N/A
Brown hare	No anticipated impact	N/A
Hedgehog	Hedgehogs were identified during the data search as being within the vicinity of the site. Potential permanent loss of habitat although it is	UK BAP Priority

	unlikely to form an important area for this species due to abundance of more suitable habitat within the vicinity, the site does not provide a corridor for movement.	Species
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3.2 Relevant Legislation and Policy Framework

Invasive Non-Native Species

- 3.2.1 The rhododendron found on the eastern access track is listed on Schedule 9 of the Wildlife and Countryside Act 1981 and is therefore subject to the conditions placed in Section 14 of the Act. Section 14 prohibits the planting of this species in the wild or actions which would otherwise cause them to grow. These provisions are necessary to prevent the establishment of non-native plant species which may be detrimental to our native wildlife.

Bats

- 3.2.2 The following legislation makes it an offence to injure or kill a bat; to deliberately, recklessly or intentionally disturb a bat whilst in a roost; or to destroy a roost:
- The Conservation of Species and Habitats (Habitat Regs.) 2012;
 - Wildlife and Countryside Act 1981 (as amended); and
 - The Countryside and Rights of Way Act 2000.

Breeding Birds

- 3.2.3 Wild birds are afforded protection through the Wildlife and Countryside Act 1981 (as amended), and prohibits the killing, injuring, taking, or selling, of any wild bird or their nests or eggs. Section 2 of the Act also prohibits the disturbance of birds listed on Schedule 1 bird species at the nest or the dependent young of Schedule 1 birds.

Hedgehogs

- 3.2.4 Hedgehogs are listed as Priority Species for conservation action on the UK Biodiversity Action Plan. Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006 lists Species of Principal Importance, these species have all been identified as requiring action within the UK Biodiversity Action Plan (UK BAP), which since been succeeded by the 'UK Post-2010 Biodiversity Framework (July 2012). S41 of the NERC Act places a duty on all government departments, including local and regional authorities, to consider these species when carrying out their functions. In addition, government departments are required to ensure that all developments contribute to and, where possible, provide net gains in biodiversity, as well as enhance possible habitats for protected species.

Planning policy Status

- 3.2.5 In addition, the National Planning Policy Framework (NPPF) (2012) requires planning authorities to use the planning system to enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible.

4 Recommendations

4.1 Habitats and Botany

- 4.1.1 Locally native plants should be used for the landscaping of the new site. Flowering species should be planted to encourage insects, for example buddleia (*Buddleja davidii*), forget-me-not (*Myosotis arvensis*), honeysuckle (*Lonicera periclymenum*), thyme (*Thymus polytrichus*), together with fruiting trees/shrubs such as rowan (*Sorbus aucuparia*) and apple (*Malus domestica*) that birds can use for foraging.
- 4.1.2 Where fencing is necessary, climbers should be planted to increase the insect diversity and hence foraging opportunities for bats. Climbing species should include old man's beard (*Clematis vitalba*), ivy, common jasmine (*Jasminum officinale*) and honeysuckle (*Lonicera periclymenum*). Standard trees should be planted within residential gardens.
- 4.1.3 Tree species planted within gardens should include a mixture of trees with bat roosting potential, such as oak (*Quercus spp.*), ash (*Fraxinus excelsior*) and beech (*Fagus sylvatica*), together with trees planted in belts and clusters to support foraging and commuting bats, such as silver birch (*Betula pendula*), elm (*Ulmus spp.*), and willow.
- 4.1.4 Planted species should be monitored for the first five years and any dead specimens replaced as necessary.
- 4.1.5 If the rhododendron found on the access track in the east of the site requires removal this should be undertaken carefully and removed to a licensed tip to ensure that this species is not spread into the wild. Soil underneath the plants should also be disposed of appropriately and not used for landscaping.

4.2 Bats

- 4.2.1 No night working should be undertaken during the construction phase to minimise disturbance to foraging bats. It is recommended that lighting on the new housing development is kept to an absolute minimum; where unavoidable, low/high pressure sodium lamps should be used in preference to mercury. Lighting should be directed to where it is needed and light spillage avoided by using accessories such as hoods, cowls, louvers and shields to direct the light. The height of the lighting columns should be as short as is possible. Pedestrian lighting could take the form of low level lighting that is below 3 lux at ground level (Institute of Lighting Engineers/BCT, 2007).
- 4.2.2 In accordance with recommendations stated in '*Biodiversity for Low and Zero Carbon Buildings: A Technical Guide for New Build*' (Williams, 2010) it is recommended that at least two bat roosting features are incorporated into the new building designs. These should take the form of bat boxes either integrated into the walls of buildings (e.g. the Habibat) or attached to walls (e.g. a Schwegler 2FE Wall Mounted Bat Shelter). Boxes should be inserted as high as possible on a south/south-east/south-west direction and away from any lighting.

4.3 Breeding Birds

4.3.1 It is recommended that to avoid destruction of active bird's nests that vegetation clearance is undertaken outside of the bird breeding season, between mid-August to very early March. If these dates cannot be achieved a check should be made by a suitably qualified ecologist immediately prior to works commencing to look for active nests. To replace lost nesting habitat it is recommended that at least one building is constructed with appropriate swallow nesting access as outlined in Williams (2010), this could include nest platforms inside an outbuilding such as a garage or electricity substation.

4.3.2 In addition externally erected bird boxes are recommended on at least two dwellings in accordance with *Biodiversity for Low and Zero Carbon Buildings: A Technical Guide for New Build* (Williams, 2010). A range of boxes should be provided to account for different species, for example swift boxes (e.g. Schwegler No.16) and house sparrows (e.g. Schwegler 1SP).

4.4 Hedgehogs

4.4.1 A brief walkover of the grassland should be made to check for the presence of hedgehogs prior to soil stripping. Excavations should not be left open at night to prevent falling inside. Gardens can provide suitable habitat for hedgehogs therefore any fencing should allow the passage of them between gardens.

5 References

5.1 Cited References

- 5.1.1 Department for Communities and Local Government (2012). National Planning Policy Framework. Department for Communities and Local Government, London.
- 5.1.2 Entwistle, A.C., Harris, S., Hutson, A.M., Racey, P.A., Walsh, A., Gibson, S.D., Hepburn, I., and Johnston, J. (2001) Habitat Management for Bats: A guide for land managers, land owners and their advisors. Joint Nature Conservation Committee, Peterborough.
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- 5.1.5 Joint Nature Conservation Committee (2003). Handbook for Phase 1 Habitat Survey – a technique for Environmental Audit (revised reprint 2007).
- 5.1.6 MAGIC (Multi Agency Geographic Information for the Countryside) <http://www.magic.gov.uk/>
- 5.1.7 NBN (National Biodiversity Network) www.searchnbn.net
- 5.1.8 Oldham R.S., Keeble J., Swan M.J.S., and Jeffcote M. (2000). Evaluating the Suitability of Habitat for the Great Crested Newt. Herpetological Journal, Vol10, pp 143-155.
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- 5.1.10 Strachan, R. (2006). Water Vole Conservation Handbook; Second Edition. English Nature, Environment Agency and Wildlife Conservation Research Unit. George Street Press Ltd.
- 5.1.11 Woods, M. (1005). The Badger. The Mammal Society.

6 Figures

6.1 Figure 1 – Site Location Plan

6.2 Figure 2 – Extended Phase 1 Habitat Survey

6.3 Figure 3 - Photographs

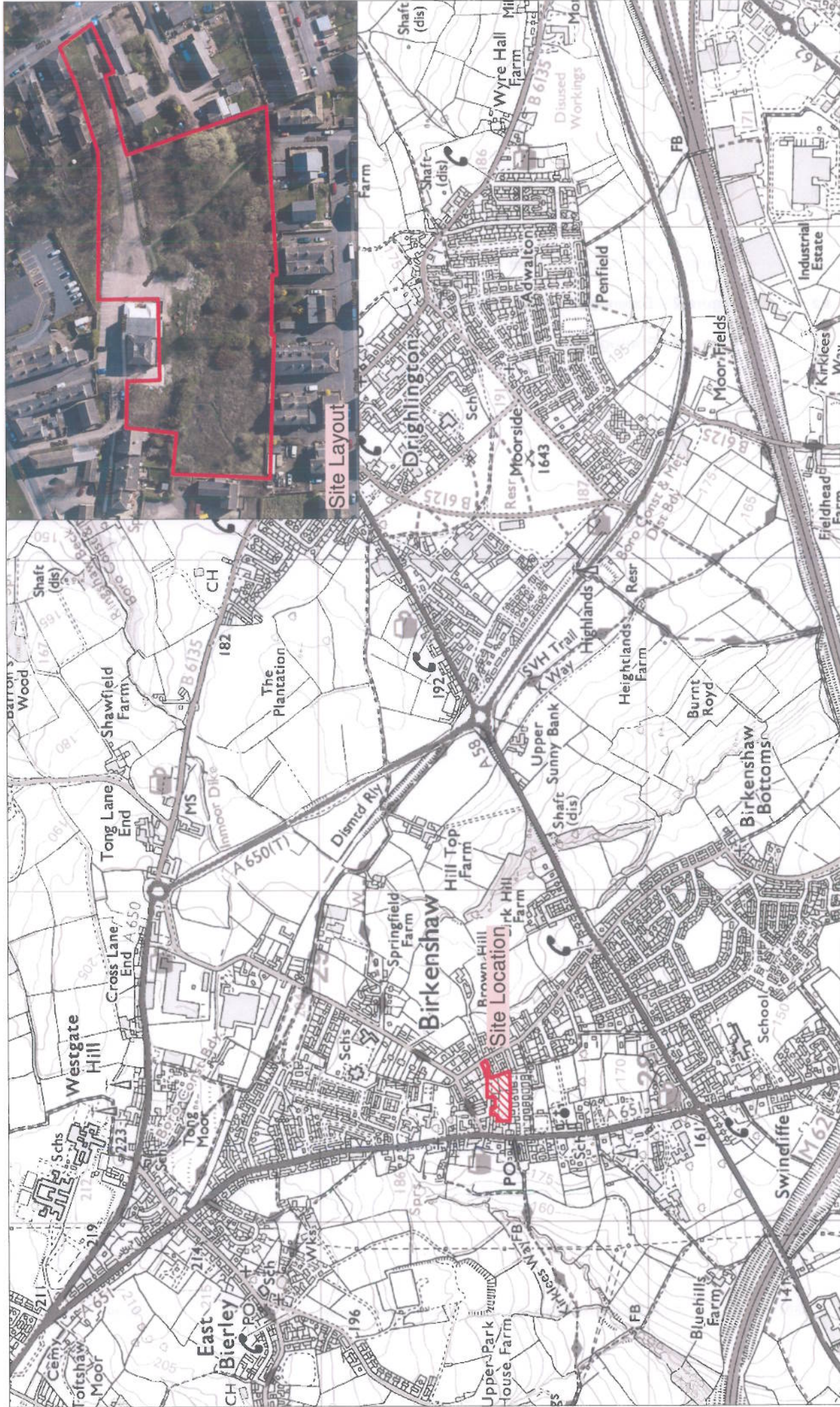


Figure 1 - Site Location and Layout

Croft Street, Birkenshaw - Extended Phase 1 Habitat Survey

Contains Ordnance Survey data © Crown copyright and database right [2013]
This mapping uses OS Open Data VectorMap District (1:25'000)

Date

Map reference

Approved by

Scale

03.04.14

039_14/RE01 - FIG 1

Bill Lever

1:15'000 / Inset 1:200 at A4



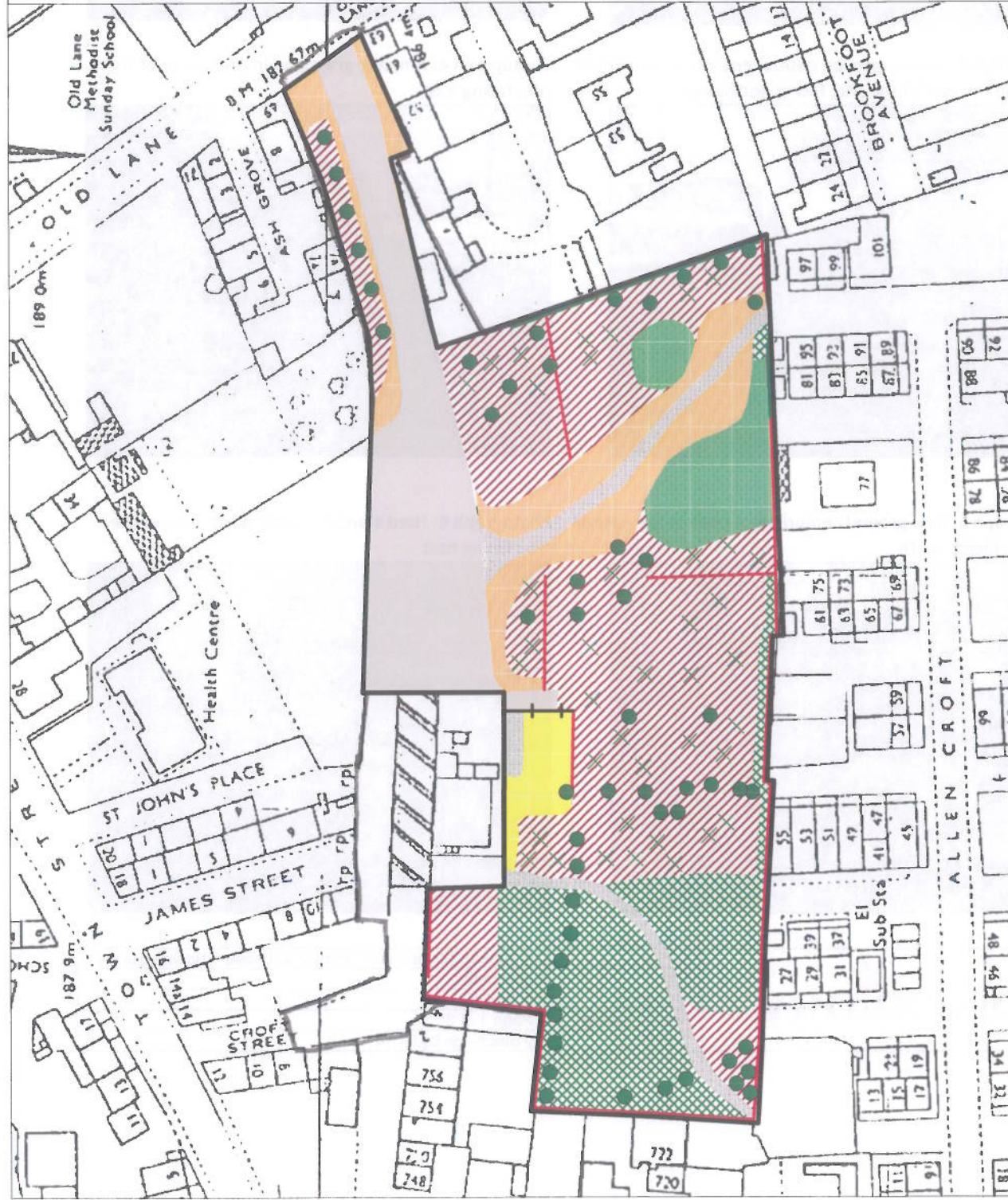


Figure 2 - Phase 1 Habitat Map
 Croft Street, Birkenshaw
 Extended Phase 1 Habitat Survey
 Basemap provided by Adept Consulting Engineers Ltd



Page	1 of 1
Map reference	039_14/RE01 - FIG 1
Approved by	Jenny Clarke
Scale	1:15'000 at A4

Photograph 1: Tall ruderal in the centre of the site, facing south



Photograph 2: Semi-natural broad-leaved woodland in the south-east of the site, facing west



Photograph 3: Semi-improved neutral grassland adjacent to a track in the east of the site, facing north-west



Photograph 4: Amenity grassland in the centre of the site, facing east



Photograph 5: Bare ground comprising a track in the east of the site, facing south



Photograph 6: Hard standing in the north-east of the site, facing east



Photograph 7: Dense scrub in the west of the site, facing west



Photograph 8: Scattered scrub in the west of the site, facing north-east



Photograph 9: Scattered broad-leaved trees in the west of the site, facing north-east



7 Appendix 1 – Proposals

RESIDENTIAL DEVELOPMENT - CROFT STREET, BIRKENHEAD, 4.11.13.

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N.T.S.

8 Appendix 2 – Survey Methodologies

8.1 General

- 8.1.1 A survey area was defined which is shown on Figure 1 (hereafter named 'the site'). The survey visit was undertaken on 19th March 2014 by Jennifer Clarke (MCIEEM).

8.2 Desk Study

- 8.2.1 A standard 'study area' was defined which encompasses an area 2km from the site. The following sources were used in order to provide data:

- West Yorkshire Ecology (WYE) (www.ecology.wyjs.org.uk/) – to gather records of European and UK protected species and habitats as well as third tier sites (non-statutory) designated for nature conservation;
- Multi-Agency Geographic Information for the Countryside (MAGIC) (www.magic.gov.uk) – to ascertain whether there are any statutory sites designated for nature conservation; and
- Aerial photos – in order to aid preliminary ecological and overall assessment of the site.

8.3 Phase 1 Habitat Survey

- 8.3.1 A walkover survey was undertaken in accordance with Phase 1 Habitat Survey Guidelines (JNCC, 2010). The Phase 1 Habitat Survey methodology provides a standard technique for classifying and mapping habitats. The approach is based upon differentiating between various vegetation and other topographical and substrate features such as watercourses. Phase 1 Habitat maps are used to identify and locate features of interest, e.g. Biodiversity Action Plan (BAP) habitats.

- 8.3.2 Phase 1 habitat mapping also necessitates the production of target notes which are numbered sequentially and mapped. Target notes are used to provide further information on habitat features of particular or potential interest. They record the prominent and/or characteristic plant species present in a discrete block of vegetation. All animal and plant names are referred to in the text under their common names and scientific names. All nomenclature for vascular plants follows Stace (1997). Floral diversity and broad NVC of plant communities has been recorded wherever possible.

- 8.3.3 Any plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) that may be present, particularly Japanese knotweed (*Fallopia japonica*), giant hogweed (*Heracleum mantegazzianum*) and Himalayan balsam (*Impatiens glandulifera*), have been recorded and mapped.

8.4 Faunal Species

- 8.4.1 In conjunction with the Phase 1 Habitat Survey, the potential for the site to support any other legally protected faunal species and/or faunal species of nature conservation importance, e.g. UK and Local Biodiversity Action Plan (BAP) priority species was assessed during the walkover survey. Detailed surveys for most faunal species were not undertaken at this time, rather the potential for the site to support each species / species group was assessed based on the known range of each species / species group and the suitability of the habitats within the site. The following paragraphs describe the methodologies undertaken.

Badgers

- 8.4.2 Badgers can be found on a variety of habitat types. They generally prefer to create setts in undisturbed areas and within topography that is sloped. Preferred habitats for foraging include woodlands and grassland (Woods, 1995);
- 8.4.3 The site was searched for any signs of badger presence. Signs searched for included sett entrance holes, dung pits, hair snagged on fences, footprints, footpaths, scratching posts and snuffle holes created from foraging for earthworms.

Bats

- 8.4.4 No buildings are present within the site boundary, however all trees within the site were surveyed for signs of bat presence in accordance with the Bat Surveys Good Practice Guidelines (BCT, 2012). Bats can utilise trees for a wide variety of purposes, including as roosts (maternity, hibernation, day and night), feeding perches, and as sheltered areas for foraging. Trees were assessed for signs of roosting bats from ground level using binoculars. Signs searched for included bat droppings on the trunk and base of the trees, dead juvenile bats, and grease marks around entrances, and noises of bats calling from within the roost.
- 8.4.5 An assessment was also made of the potential that the trees have to support bats throughout the year. Suitable bat roosting features were searched for, including loose bark, woodpecker holes, rot holes, mature ivy, dead wood, and stress splits. Each tree was then awarded a level of potential to support roosting bats in summer, the breeding period, transitionally and in winter (roost requirements can be found in Appendix 1). The level of potential is defined by the presence of suitable roosting features together with the locality, environmental conditions, age and proximity to suitable bat foraging habitat. The levels of potential are defined below:
- **Negligible** – Building or tree with no roosting potential and located in poor bat foraging habitat;
 - **Low** – Building or tree with limited roosting potential with limited suitable bat foraging habitat. No suitability for breeding and/or hibernating bats;
 - **Moderate** – Building or tree with some roosting potential of varying types and sizes, connected to some optimal bat foraging habitat. Some suitability for breeding bats and/or hibernating bats;
 - **High** – Building or tree with multiple potential roosting cavities of varying types and sizes. High suitability for breeding bats and/or hibernating bats and connectivity to a range of optimal bat foraging habitats; and
 - **Confirmed roost** – Presence of droppings found internally, underneath roost access points or the presence of bats confirmed.

Breeding Birds

- 8.4.6 Nesting sites for birds depends on the species involved and can be created within structures (buildings, bridges, cliffs etc.), trees, shrubs, within ground vegetation and on bare ground, providing that suitable foraging habitat is adjacent. Habitats within the site boundary were assessed for their suitability for nest creation.

Great Crested Newts

- 8.4.7 Newts require standing water on the site or on adjacent land. Ordnance Survey maps and aerial photographs were utilised to identify any ponds that are within 250m of the site and their suitability therefore assessed for great crested newts. Great crested newts require different habitats at different times of the year; terrestrial habitat most suitable for newts includes scrub, unimproved grassland, woodland and gardens (Oldham *et al.*, 2000).

Otters

- 8.4.8 Habitats on site were assessed for their suitability for otters; this species requires freshwater habitat in the form of standing or running water. The water must contain prey species, such as fish, crustaceans or amphibians. Suitable riparian habitat is required that can support resting sites and natal dens, the latter of which are created within secure, undisturbed sites such as within exposed tree roots adjacent to the water, or within disused rabbit entrances.

Reptiles

- 8.4.9 Habitats on site were assessed for their suitability for reptile species. The habitat requirements of this group depend on the species involved. The most likely species to be encountered in the UK are common lizard (*Zootoca vivipara*), grass snake (*Natrix natrix*), slow worm (*Anguis fragilis*) and adder (*Vipera berus*). Reptiles require a heterogeneous habitat with different vegetation types and structures, including bare ground patches for basking.

Water Voles

- 8.4.10 Habitats on site were assessed for their suitability for water voles; this species requires freshwater habitat that has a relatively stable water level. Undisturbed riparian habitat is required that has an abundance of vegetation species such as grasses and rushes that provide both cover from predators and act as a food source (Strachan, 2006).

White-Clawed Crayfish

- 8.4.11 Habitats on site were assessed for their suitability for white-clawed crayfish; this species of crayfish requires calcareous streams with an abundance of suitable refuges, such as a rocky substrate, tree roots and leaf litter (Holdich, 2003).

8.5 Limitations

- 8.5.1 The Extended Phase 1 Habitat Survey was conducted during a sub-optimal time of year to survey for fauna and flora due to its timing in Winter. However, given the habitats available on the site it is considered that the survey provides sufficient data at this stage in the assessment.
- 8.5.2 The species data collected through this desk study was obtained from West Yorkshire Ecology. This is the standard source to obtain relevant records from the local area within 2km. However, although the records are considered adequate for this study, they might not be comprehensive as data can be held by individuals, and the data records might not have been recently updated. The species data provided by West Yorkshire Ecology is considered to be valid for 12 months usage, thereafter a further request for more up to date data is recommended to comply to best practise requirements.

10 Appendix 3 – Desk Study Results



West Yorkshire
Ecology

West Yorkshire Joint Services

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ECOLOGICAL RECORDS SEARCH

FOR

**CROFT STREET,
BIRKENSRAW**

Ref No:- 20140312 K629 LP

Date: 24/03/2014

Prepared For Jennifer Clarke

BL Ecology Ltd



West Yorkshire
Joint Services

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1 Introduction

This report provides a summary of the protected and notable species, and designated sites information held by West Yorkshire Ecology (WYE) within 2km of grid reference SE 20370 28443.

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
SE217271	Common Toad	<i>Bufo bufo</i>	2007	field record		Sch5_sect9.5b; UKBAP; WYBAP; Kirklees BAP
SE217271	Common Frog	<i>Rana temporaria</i>	2007	field record		Sch5_sect9.5b; WYBAP
SE217271	Smooth Newt	<i>Triturus vulgaris</i>	2007	field record		Sch5_sect9.5b; WYBAP

BIRDS

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE2159028340	Mallard	<i>Anas platyrhynchos</i>	02/09/2008	field record	200 Count of Adult	BoCC:Amber
SE217271	Mallard	<i>Anas platyrhynchos</i>	1970 - 1988	field record		BoCC:Amber
SE2211028420	Mallard	<i>Anas platyrhynchos</i>	28/08/2008	None	4 Count of Adult Female; 5 Count of Adult Male	BoCC:Amber
SE2030	Meadow Pipit	<i>Anthus pratensis</i>	1970 - 1988	field record		BoCC:Amber
SE217271	Meadow Pipit	<i>Anthus pratensis</i>	1970 - 1988	field record		BoCC:Amber
SE2159028340	Swift	<i>Apus apus</i>	02/09/2008	field record	2 Count of Adult	BoCC:Amber; WYBAP
SE217271	Swift	<i>Apus apus</i>	1970 - 1988	field record		BoCC:Amber; WYBAP
SE2198027890	Swift	<i>Apus apus</i>	29/08/2008	field record	10 Count of Adult	BoCC:Amber; WYBAP
SE2027	Goldfinch	<i>Carduelis carduelis</i>	1970 - 1988	field record		Kirklees BAP

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE217271	Goldfinch	<i>Carduelis carduelis</i>	2007	field record		Kirklees BAP
SE217271	Goldfinch	<i>Carduelis carduelis</i>	1970 - 1988	field record		Kirklees BAP
SE2027	House Martin	<i>Delichon urbica</i>	1970 - 1988	field record		BoCC:Amber; WYBAP
SE217271	House Martin	<i>Delichon urbica</i>	1970 - 1988	field record		BoCC:Amber; WYBAP
SE2030	Yellowhammer	<i>Emberiza citrinella</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Bradford BAP
SE217271	Yellowhammer	<i>Emberiza citrinella</i>	2007	field record		BoCC:Red; UKBAP; WYBAP
SE217271	Yellowhammer	<i>Emberiza citrinella</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP
SE2027	Kestrel	<i>Falco tinnunculus</i>	1970 - 1988	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE2029	Kestrel	<i>Falco tinnunculus</i>	1970 - 1988	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE217271	Kestrel	<i>Falco tinnunculus</i>	2007	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE217271	Kestrel	<i>Falco tinnunculus</i>	1970 - 1988	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE217271	Brambling	<i>Fringilla montifringilla</i>	2007	field record		Sch1_part1
SE2027	Swallow	<i>Hirundo rustica</i>	1970 - 1988	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE217271	Swallow	<i>Hirundo rustica</i>	1970 - 1988	field record		BoCC:Amber; WYBAP; Kirklees BAP
SE2202028270	Swallow	<i>Hirundo rustica</i>	28/08/2008	field record	2 Count of Adult	BoCC:Amber; WYBAP
SE217271	Common Gull	<i>Larus canus</i>	1970 - 1988	field record		BoCC:Amber
SE2029	Black-Headed Gull	<i>Larus ridibundus</i>	1970 - 1988	field record		BoCC:Amber
SE217271	Black-Headed Gull	<i>Larus ridibundus</i>	1970 - 1988	field record		BoCC:Amber
SE217271	Spotted Flycatcher	<i>Muscicapa striata</i>	2007	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE2027	House Sparrow	<i>Passer domesticus</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE217271	House Sparrow	<i>Passer domesticus</i>	2007	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE217271	House Sparrow	<i>Passer domesticus</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE2027	Tree Sparrow	<i>Passer montanus</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE217271	Tree Sparrow	<i>Passer montanus</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE217271	Grey Partridge	<i>Perdix perdix</i>	2007	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE217271	Willow Warbler	<i>Phylloscopus trochilus</i>	2007	field record		BoCC:Amber
SE217271	Willow Warbler	<i>Phylloscopus trochilus</i>	1970 - 1988	field record		BoCC:Amber
SE217271	Green Woodpecker	<i>Picus viridis</i>	2007	field record		BoCC:Amber
SE2027	Dunnock	<i>Prunella modularis</i>	1970 - 1988	field record		BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE217271	Dunnock	<i>Prunella modularis</i>	1970 - 1988	field record		BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE217271	Bullfinch	<i>Pyrrhula pyrrhula</i>	2007	field record		BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE217271	Bullfinch	<i>Pyrrhula pyrrhula</i>	1970 - 1988	field record		BoCC:Amber; UKBAP; WYBAP; Kirklees BAP
SE217271	Whinchat	<i>Saxicola rubetra</i>	1970 - 1988	field record		BoCC:Amber
SE2027	Starling	<i>Sturnus vulgaris</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE2029	Starling	<i>Sturnus vulgaris</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE217271	Starling	<i>Sturnus vulgaris</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE217271	Whitethroat	<i>Sylvia communis</i>	1970 - 1988	field record		BoCC:Amber
SE217271	Redwing	<i>Turdus iliacus</i>	1970 - 1988	field record		Sch1_part1; BoCC:Red
SE2027	Song Thrush	<i>Turdus philomelos</i>	1970 - 1988	field record		BoCC:Red; UKBAP;

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
						WYBAP; Kirklees BAP
SE217271	Song Thrush	<i>Turdus philomelos</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Kirklees BAP
SE217271	Fieldfare	<i>Turdus pilaris</i>	1970 - 1988	field record		Sch1_part1; BoCC:Red
SE2027	Mistle Thrush	<i>Turdus viscivorus</i>	1970 - 1988	field record		BoCC:Amber
SE217271	Mistle Thrush	<i>Turdus viscivorus</i>	1970 - 1988	field record		BoCC:Amber
SE2030	Lapwing	<i>Vanellus vanellus</i>	1970 - 1988	field record		BoCC:Red; UKBAP; WYBAP; Bradford BAP

PLANTS

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE217271	Narrow-Leaved Bitter-Cress	<i>Cardamine impatiens</i>	2007	field record		RDB:post2001: NT
SE218272	Spindle	<i>Euonymus europaeus</i>	2007	field record		Kirklees BAP
SE2063029050	Japanese Knotweed	<i>Fallopia japonica</i>	02/09/2008	field record	R/LA Range of DAFOR	Sch9_part2
SE217271	Bluebell	<i>Hyacinthoides non-scripta</i>	2007	field record		Sch8_sect 13.2; Kirklees BAP
SE217271	Pale St. John's-Wort	<i>Hypericum montanum</i>	2007	field record		RDB:post2001: NT
SE217271	Indian Balsam	<i>Impatiens glandulifera</i>	2007	field record		Sch9_part2

INVERTEBRATES - BEETLES

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE217271	Gyrinus natator	<i>Gyrinus natator</i>	2007	field record		RDB:Pre94:EN

INVERTEBRATES - BUTTERFLIES

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE217271	Small Heath	<i>Coenonympha pamphilus</i>	2007	field record		UKBAP
SE217271	Wall	<i>Lasiommata megera</i>	2007	field record		UKBAP; WYBAP

INVERTEBRATES - MOTHS

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE217271	Scarce Vapourer	<i>Orgyia recens</i>	2007	field record		RDB:Pre94:VU; UKBAP
SE217271	Cinnabar	<i>Tyria jacobaeae</i>	2007	field record		UKBAP; WYBAP

TERRESTRIAL MAMMALS

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE217271	Hedgehog	<i>Erinaceus europaeus</i>	2007	field record		UKBAP; WYBAP; Kirklees BAP
SE200269	Brown Hare	<i>Lepus europaeus</i>	01/07/1994	field record	1 Count of Adult	UKBAP; WYBAP; Kirklees BAP
SE217271	Weasel	<i>Mustela nivalis</i>	2007	field record		Kirklees BAP
SE217271	American Mink	<i>Mustela vison</i>	2007	field record		Sch9_part1
SE2020027893	Lesser Noctule Bat	<i>Nyctalus leisleri</i>	19/05/2006	Roost		Sch5; WYBAP; Kirklees BAP
SE20212807	Lesser Noctule Bat	<i>Nyctalus leisleri</i>	2006	Roost		Sch5; WYBAP; Kirklees BAP
SE217271	Leisler's Bat	<i>Nyctalus leisleri</i>	2007	field record		Sch5; WYBAP; Kirklees BAP
SE20212807	Noctule	<i>Nyctalus noctula</i>	11/05/2008	Roost	8 Count of Adult	Sch5; UKBAP; WYBAP; Kirklees BAP
SE217271	Noctule	<i>Nyctalus noctula</i>	2007	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE20522650	Pipistrelle	<i>Pipistrellus pipistrellus</i>	10/05/2010	field record		Sch5; WYBAP; Kirklees BAP
SE217271	Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	2007	field record		Sch5; UKBAP; WYBAP; Kirklees BAP
SE2050527830	Pipistrelle Bat species	<i>Pipistrellus sp.</i>	23/05/2007	Roost		Sch5
SE2092927400	Pipistrelle Bat species	<i>Pipistrellus sp.</i>	05/07/2006	Roost		Sch5
SE217271	Grey Squirrel	<i>Sciurus carolinensis</i>	2007	field record		Sch9_part1
SE1923929252	Vesper Bat species	<i>Vespertilionidae</i>	15/05/2000	Roost	18 Count of Adult	Sch5
SE19733016	Vesper Bat species	<i>Vespertilionidae</i>	08/08/2007	field record		Sch5

Grid Ref	Common Name	Latin Name	Date	Record Type	Abundance	Designation
SE20452889	Vesper Bat species	<i>Vespertilionidae</i>	1996	in building		Sch5
SE2055227430	Vesper Bat species	<i>Vespertilionidae</i>	14/07/2005	Roost	35 Count of Adult	Sch5
SE21072773	Vesper Bat species	<i>Vespertilionidae</i>	30/06/2005	in building	1 Count of Adult	Sch5
SE22052893	Vesper Bat species	<i>Vespertilionidae</i>	11/03/2005	Grounded	1 Count of Adult	Sch5

2.1 SENSITIVE SPECIES RECORDS

2.1.1 Badgers

There is known badger activity in this area.

Badgers are protected under the Protection of Badgers Act 1992 and offences can result from both reckless and deliberate damage, disturbance or destruction.

Please see the separate confidential badger map for more information.

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 Ecological or Geological Importance

There are no second tier sites (SEGI) occurring within the search area.

3.3.2 Sites of Scientific Interest

There are no second tier sites (SSI) occurring within the search area.

3.3.3 Local Nature Reserves

Local Nature Reserves (LNR) 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:

- Oakwell Park
- Tong Moor

3.3.4 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 and SEGIs, as set out in UDPs/LDFs.

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

3.3.5 Leeds Nature Areas

There are no Leeds Nature Areas (LNA) within your search area.

3.3.6 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:

- Tong Moor

3.3.7 Bradford Wildlife Areas

Bradford Wildlife Areas (BWA) are third tier sites, designated by the local authority on the basis of their amenity value. Many of these sites have recently been resurveyed and are being assessed against new Local Wildlife Sites (LWS) criteria. Further citations and species lists for specific sites can be supplied on request.

🚫 Denotes sites with no public access

PARK WOOD, Tong 🚫

SE 215310

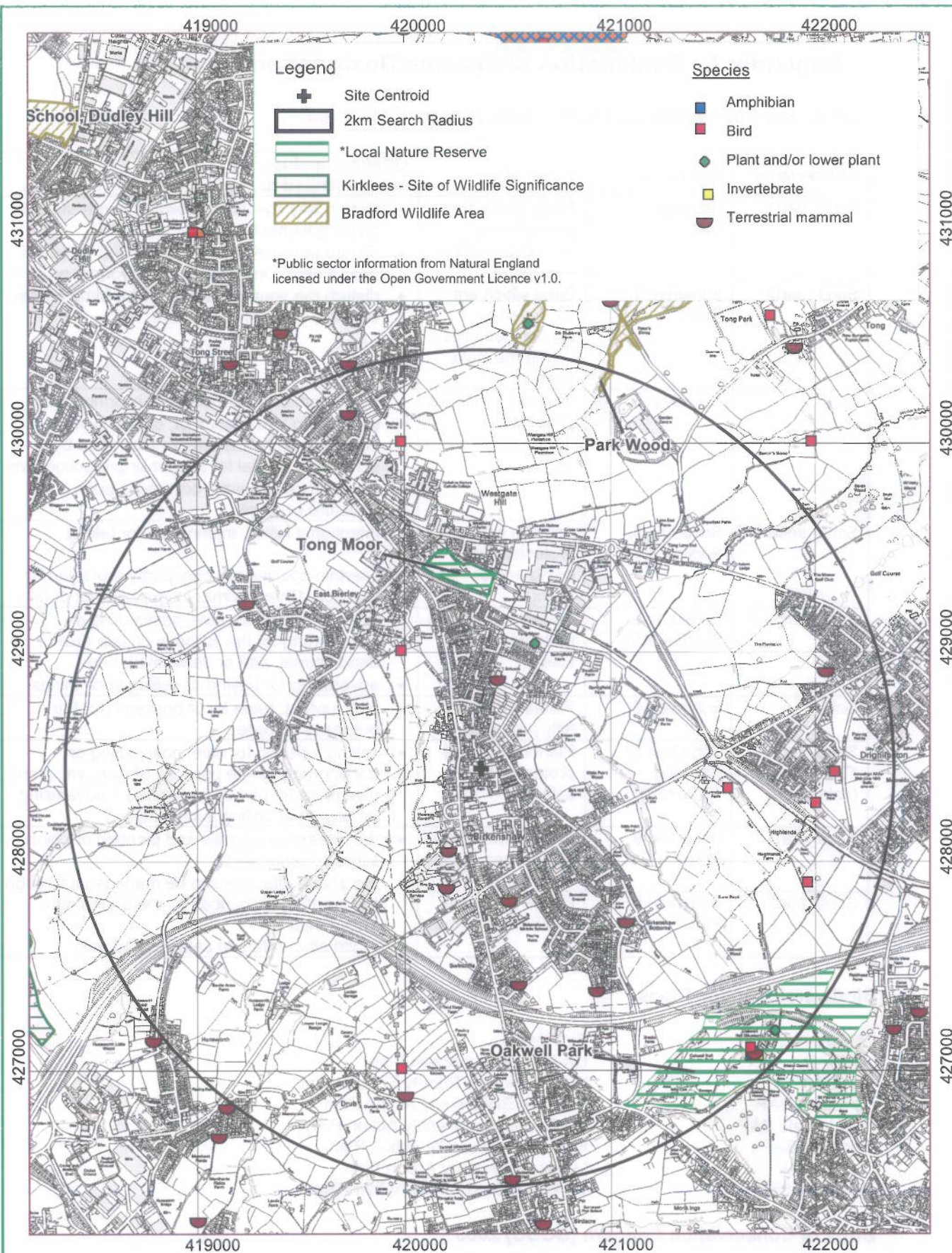
Privately owned. Although a mixed coniferous/deciduous plantation (possibly replanted ancient woodland) this site is important for its size and location in strongly agricultural area.

3.3.8 Regionally Important Geological Sites

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



Figure 1 – Species and Designated Sites



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metres
0 500 1000



Scale 1:25000
At Size A4



West Yorkshire
Ecology

West Yorkshire Joint Services

**FIGURE 1:
SPECIES &
DESIGNATED
SITES**

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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> intentional killing, injuring and/or taking <p>NB: certain species are only partly protected by this section. Check primary legislation for details.</p>
Sch5_sect9.5	Schedule 5, Section 9(5)	Animals which are protected from sale	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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. <p>NB: <i>Tyto alba</i> refers to captive bred only.</p>
Sch9_part2	Schedule 9, Part 2	Plants which are established in the wild.	

Biodiversity Action Plans

Abbreviation

UKBAP
WYBAP
Bradford BAP
Calderdale BAP
Kirklees BAP
Leeds BAP
Wakefield BAP

Full Name

UK Biodiversity Action Plan
West Yorkshire Priority Species List
Bradford Biodiversity Action Plan
Calderdale Biodiversity Action Plan
Kirklees Biodiversity Action Plan
Leeds Biodiversity Action Plan
Wakefield Biodiversity Action Plan

Birds of Conservation Concern (BOCC) 2009

List

Red
Amber

Description

High conservation concern
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

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Latin Name	English Name
<i>Acer pseudoplatanus</i>	sycamore
<i>Aegopodium podagraria</i>	ground-elder
<i>Agrostis stolonifera</i>	creeping bent
<i>Alopecurus pratensis</i>	meadow foxtail
<i>Chamerion angustifolium</i>	rosebay willowherb
<i>Cirsium arvense</i>	creeping thistle
<i>Cirsium vulgare</i>	spear thistle
<i>Crataegus monogyna</i>	hawthorn
<i>Dactylis glomerata</i>	cock's-foot
<i>Deschampsia cespitosa</i>	tufted hair-grass
<i>Fraxinus excelsior</i>	ash
<i>Galium aparine</i>	cleavers
<i>Geum urbanum</i>	wood avens
<i>Hedera helix</i>	ivy
<i>Heracleum sphondylium</i>	hogweed
<i>Holcus lanatus</i>	Yorkshire-fog
<i>Ilex aquifolium</i>	holly
<i>Ligustrum ovalifolium</i>	garden privet
<i>Lolium perenne</i>	perennial rye-grass
<i>Lonicera periclymenum</i>	honeysuckle
<i>Narcissus sp.</i>	daffodil
<i>Poa pratensis</i>	smooth meadow-grass
<i>Prunus spp.</i>	cherry species
<i>Pteridium aquilinum</i>	bracken
<i>Ranunculus repens</i>	creeping buttercup
<i>Rhododendron ponticum</i>	rhododendron
<i>Ribes uva-crispa</i>	gooseberry
<i>Rubus fruticosus agg.</i>	bramble
<i>Rumex obtusifolius</i>	broad-leaved dock
<i>Salix caprea</i>	goat willow
<i>Sambucus nigra</i>	elder
<i>Senecio jacobaea</i>	common ragwort
<i>Senecio vulgaris</i>	groundsel
<i>Taraxacum officinale</i>	common dandelion
<i>Trifolium repens</i>	white clover
<i>Tussilago farfara</i>	colt's-foot
<i>Ulmus glabra</i>	wych elm
<i>Urtica dioica</i>	common nettle