

**LAND NORTH OF BIGGINS WOOD ROAD  
FOLKESTONE  
KENT:  
ECOLOGICAL SURVEY**

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## **1.0 INTRODUCTION**

**1.1** This document was compiled in order to report upon a general ecological survey of an area of land located north of Elventon Close and Charles Crescent (off Biggins Wood Road), east of Caesar's Way and south of the M20 motorway at Folkestone, Kent (OS / TR203374<sup>1</sup>). The land is a former minerals quarry that has been used as a rubbish tip in the past, with consequent deposition of a range of different soil types and related materials. It is at present undeveloped and largely consists of an intimate mixture of vegetation types such as the OV25 *Urtica dioica* – *Cirsium arvense*, the *Filipendula ulmaria* – *Angelica sylvestris* sub community of the OV26 *Epilobium hirsutum* community and the OV27 *Epilobium angustifolium* communities of Rodwell (2000), and varying stages of succession of the W22 *Prunus spinosa* – *Rubus fruticosus* scrub and W21 *Crataegus monogyna* – *Hedera helix* scrub types of Rodwell (1998), amongst others. This reflects the varied land use history and past disturbance of the area. The whole lays on various soils of a partially calcareous and partially seasonally – waterlogged nature at the base of the Downs at an average elevation of c. 39 metres OD. The site is about 250 metres south of the North Downs Area of Outstanding Natural Beauty<sup>2</sup> and about 900 metres south of the Folkestone to Etchinghill Escarpment Site of Special Scientific Interest<sup>3</sup>.

**1.2** The approximate extent of the survey area is shown in Figure 1.

**1.3** The reptiles of the site have previously been surveyed by Newcombe (2009).

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<sup>1</sup> Approximate location.

<sup>2</sup> Hereafter referred to as the 'AONB'.

<sup>3</sup> Hereafter referred to as the 'SSSI'.

## 2.0 METHODS

**2.1** The site has been visited continuously since approximately July 2010, and most of the field work was carried out in that year, except as noted below<sup>4</sup>. The purpose of the visits was to carry out ecological surveys as follows:

**2.1.1** The **plant and animal species** of the site were listed by using the variety of inventory methods described by Sutherland (2000) and Slingsby and Cook (1986).

**2.1.2** A search was also made for any species or habitat suitable for any species that might be specifically **protected** for conservation purposes by wildlife legislation<sup>5</sup> such as badgers (*Meles meles*), dormouse (*Muscardinus avellanarius*) and reptiles, using appropriate established techniques e.g. assessment of potential habitat for reptiles by comparison of the habitat on site with descriptions of potential reptile habitat given by Gent and Gibson (2003) as augmented by previous personal experience.

**2.2** A search was also made for species (or habitat suitable for species) that might be included within the short list of the national **Biodiversity Action Plans** (BAP)<sup>6</sup> (Biodiversity Steering Group, 1995 as amended) and the Kent Red Data Book (RDB) (Waite, 2000). For birds, a search was made for species which are included within the bird '**Red List**' (Eaton, Brown, Noble, Musgrove, Hearn, Aebischer, Gibbons, Evans and Gregory (2009)).

**2.3** Whenever any notable species were found, monitoring of an appropriate kind was carried out in 2010 and 2011<sup>7</sup> using appropriate methodology as detailed below.

**2.4** During 2010 much of the scrub which had covered approximately 25% of the total area of the site<sup>8</sup> was removed and thereafter kept under control as low ruderal vegetation, with the exception of areas where there was vegetation that had been identified as being suitable for use by reptiles.

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<sup>4</sup> The species lists have been continuously updated since then.

<sup>5</sup> Mostly, this included species listed by Christopher Betts Environmental Biology (2000) and Chambers (2007) as being protected by the Wildlife and Countryside Act 1981, as amended.

<sup>6</sup> As amended.

<sup>7</sup> Primarily during 2011. This included bat detector surveys, repeat visits to the badger sett etc.

<sup>8</sup> Most of it was scattered scrub with extensive dominant areas of bramble.

### 3.0 RESULTS

**3.1** A total of 225 **species** of plants and animals were recorded in the site and are detailed in Appendix 1. Of these, a total of 108 species were vascular plants: any obviously – planted garden or horticultural plants were not recorded.

**3.2** A total of 20 **bird** species were recorded in the site; these species were mostly flying over or feeding on site, although some nested. The list of species recorded is given in Appendix 1. No specific breeding bird survey was carried out but breeding evidence was recorded when it was observed.

**3.3** The following species which are specifically **protected** under wildlife legislation were found on site:

- Slow – worm and common lizard which are both protected by the provisions of the Wildlife and Countryside Act 1981.
- Badger, which is protected by the Protection of Badgers Act 1992.
- Pipistrelle bat, which is protected by the Wildlife and Countryside Act 1981 and related legislation and is a Kent RDB species.

**3.4** The following **BAP** species and bird **Red List** species were noted on site:

- Fieldfare, a bird red list species.
- Herring gull, a bird red list species.
- House sparrow, a bird red list species and Kent RDB species.

## 4.0 DISCUSSION AND CONCLUSIONS

- 4.1** The **total number of species** recorded at the site is small by comparison with the potential number of species that might be recorded given more time and additional visits in which to undertake the work, possibly over several years: however, short surveys such as this are good at giving a 'snapshot' of the ecological value of a given site and showing which species require more detailed survey.
- 4.2** The **methods** of the survey have been used extensively elsewhere with consistent results and accord with good practice guidelines (e.g. Institute of Environmental Assessment, 1995). Signs of protected species and their habitat parameters are reasonably obvious to an experienced surveyor. Ecological surveys of this type are valuable in terms of helping to determine whether or not animals are likely to be present, are present, or have been present in or around a site. However, the results of a survey are partially determined by the time of year at which the survey takes place. For example, if birds are present in the breeding season it is much easier to confirm their breeding status than later in the year when nests may have been lost to the weather. However, even if the animals or birds themselves are not found, providing that suitable conditions are prevalent for the preservation of evidence, some signs of their past presence should remain within a site.
- 4.3** The **plant list** of the survey area was fairly typical of disused sites of this type, where the mixture of soils and conditions creates a host of opportunities for calcicole species, amongst others, to grow alongside more ruderal plants and plants of wet woodland e.g. pyramidal orchid and horseshoe vetch which are common on the nearby SSSI, with wood horsetail and wild angelica<sup>9</sup>. The mixture of plants represented the habitats of the surrounding area from which seed had ultimately come. The numbers of species and the actual range of species that were present in the site were nevertheless more or less as expected for a site of this type of habitat and management and there were no notable species.
- 4.4** The **bird** list was impressive but not exceptional, and to a certain extent was much better in the past when the scrub was present, when at least 10 singing

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<sup>9</sup> These plants, along with hemp agrimony and pendulous sedge, were present in the old woodland (Biggins Wood) which was present on part of this site before the quarry dissected it and the motorway and Channel Tunnel destroyed it (personal observation). Their strongest representation was at the entrance to the site.

male whitethroats alone were recorded. A few additional species might be expected to be found on site from time to time e.g. collared dove (*Streptopelia decaocto*) or linnet (*Acanthis cannabina*) which might be expected to feed or nest in the scrub, although the loss of most of the scrub has severely limited the numbers of these scrub – inhabiting species.

- **Fieldfare** is normally regarded as a winter visitor and passage migrant in Kent (Taylor, 1981), although it is still expanding its breeding range (Hagemeijer and Blair, 1997). It nests in bushes, trees, towns, parks, orchards and gardens (Cramp, 1988) and may therefore nest in Kent in the future. Its place in the bird red list is largely because of its rare breeding status rather than to its status as a migrant. As a result, it is likely to be unaffected very much by any proposed development at the site and will require no mitigation.
- **Herring gull** has been recorded from the site before on many occasions (Anon, verb comm.), and not only as a bird flying over; it has previously been observed temporarily roosting in the more open, winter –wet parts of the site. However, the site offers no more than a temporary roosting site for the species in inclement weather, as it cannot normally feed there or make any attempt to nest due to the unsuitable environment; the use of the site is purely as a temporary roost that is probably only used on limited occasions. There will therefore be no impact from redevelopment of the site as far as this species is concerned and therefore no requirement for mitigation.
- **House sparrows** have declined considerably in recent years throughout the country (Parkin and Knox, 2010; Summers – Smith, 1999) and there is now considerable concern for their future. The species remains fairly common around parts of Folkestone (personal observation) and nests in sites nearby. However, it is unlikely that the loss of the site will have any significant effect upon the species in the long term, although some minor foraging facilities may be temporarily lost. If appropriate mitigation measures<sup>10</sup> are incorporated into any new development there might even be a slight increase in potential nesting (and possibly feeding) habitat of higher quality than presently exists and there would therefore be no long – term impact.

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<sup>10</sup> Such as nesting boxes or similar devices aimed at encouraging nesting by this and other species.

**4.5** Other habitat for **protected species** was very limited because of the management of the site and its surroundings. However, the following protected species were present:

- **Reptile** presence<sup>11</sup> and reptile habitat has already been identified and protected<sup>12</sup> pending translocation<sup>13</sup>. There was limited open space suitable for reptile basking before the scrub was cleared, so common reptiles were limited throughout the site in terms of their range, and remain so because of the management regime of much of the site. A brief capture – recapture exercise in late summer 2011 suggested that the site has a small population in the order of 100 - 200 animals in total, although third – party interference with the refugia during the investigation means that this figure can only be regarded as provisional.
- Some dead standing trees in the south – western corner of the site were identified as potential **bat** habitat, but were discounted after detailed survey involving bat detectors, endoscopes and a thermal imaging camera during 2011. Pipistrelle bats from a roost in a house somewhere to the south have been observed feeding in the survey area at dusk and in the night, but in small numbers<sup>14</sup> and mostly around the edges of the site. No surveys were done before the scrub was cleared when it would have been expected that the bats were more widespread over the site, but there are, and never have been, any trees which were big enough to provide roosts. Houses nearby, however, have ample roost potential. Although there will be some minor loss of foraging potential, any new development, especially if supplied with a suitable native – species – based landscaping scheme, will probably provide similar opportunities for feeding, and enhanced opportunities for roosting, especially if bats are considered during the course of planning the building types on site.
- **Badger** had established a small sett in some bramble and hawthorn scrub near the entrance<sup>15</sup> to the site and has probably come from a sett on the other side of the motorway about 900 metres away, or may have come from

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<sup>11</sup> Described in Newcombe, 2009, when lizard presence was recorded. However, since then, slow – worms have also been found on site. The strong presence of bramble scrub previously inhibited the extent to which these species were present on site, as did unsuitable terrain such as bare road planings and similar materials and areas which were consistently winter – wet.

<sup>12</sup> By marking suitable habitat and leaving it unmanaged to date.

<sup>13</sup> A suitable translocation receptor site has been identified and is being managed on site.

<sup>14</sup> A maximum of three animals have been recorded together on one occasion, but usually it is single animals on their own.

<sup>15</sup> At approximately OS / TR204375. The sett consisted of approximately three used and two disused entrances in scrub on level clay – sand soil. It was probably used at most by one animal. It was particularly active during summer 2010, but was still active in October 2011, although it has appeared to be deserted from time to time.



a suspected but unknown population which is located deeper into central Folkestone. The sett has been occupied on and off for some time<sup>16</sup>, but was still active in October 2011. The proposal to redevelop the site will cause loss of this sett to the badgers, but further observation must be made before impact can be fully assessed and mitigation proposed. Whatever happens, if the sett remains active and showing signs of badger activity there will be a requirement of licencing under the 1992 Protection of Badgers Act. Worst case scenario is that the animal will breed, in which case there will be a definite need for an artificial sett as a replacement for the natural one, although such lone, low – status setts have, in the past, usually suddenly ceased to be active owing to badger deaths on local roads. Given the proximity of the motorway and other busy roads in the area this is most likely to happen in due course. Further monitoring will take place in early 2012 in order to determine the best course of action.

**4.6** The site is sufficiently detached from the adjacent **AONB** and **SSSI** that there will be no impact from proposed development at the site. If residential development occurs there will be potential for an increase in visitors' footfall on the SSSI but the latter is separated from the site by a motorway and direct access is difficult. However, should any provision be made for enhanced pedestrian access to the downland to the north then there will be an indefinable negative impact upon the SSSI as a result of human disturbance and related matters.

**4.7** As a result of the survey, it is strongly **recommended** that, in order to make some gains for nature conservation in line with current recommendations (Williams, 2010), some form of artificial bat roost is provided on any new buildings. Opportunities to encourage other wildlife should also include the use of Schwegler bird boxes throughout any development and a native – species based planting plan for any additional trees and shrubs. In addition, no clearance of scrub or other habitat on the site should take place during the bird breeding season<sup>17</sup> due to the protection afforded to most birds when nesting. The reptile receptor site must be prepared and translocation from existing habitat must be undertaken and complete before development can take place.

**4.8** In **summary** therefore, the site has some local reptile sites and a badger sett, plus a small population of breeding birds in the remaining scrub. Appropriate

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<sup>16</sup> The fact that there have been brief periods when the sett was not in use suggests that there is another sett site in use in the area.

<sup>17</sup> Approximately mid – March to late July of any year.

mitigation is required, although the present nature of the site is such that overall impact of proposed development for most species is low.

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**APPENDIX 1: LIST OF SPECIES RECORDED FROM THE SITE (All data approximate) (Notable species bordered in red)**

	SCIENTIFIC NAME	VERNACULAR NAME	NOTES	NO SPP
ALL FUNGI				
	<i>Armillaria mellea</i>	Honey Fungus	Local.	
	<i>Auricularia auriculajudeae</i>	Jew's Ear	On elderberry.	
	<i>Coprinus plicatilis</i>	Ink Cap		
	<i>Coriolus versicolor</i>	A bracket fungus		
	<i>Crepidotus variabilis</i>	An agaricoid fungus		
	<i>Inocybe geophylla</i>	An agaricoid fungus		
	<i>Lepiota procera</i>	Parasol Mushroom		
	<i>Mycena galopus</i>	An agaricoid fungus		
	<i>Rhytisma acerinum</i>	Sycamore Tar - spot	On sycamore leaves.	
	<i>Xylaria polymorpha</i>	Dead Men's Fingers	On dead wood.	10
LICHENES				
	<i>Parmelia saxatilis</i>	A lichen	Provisional identification.	
	<i>Xanthoria parietina</i>	A lichen		2
MOSSES				
	<i>Bryum sp.</i>	A moss		
	<i>Hypnum cuppresiforme</i>	A moss		
	<i>Rhytidiadelphus squarrosus</i>	A moss		
	<i>Thuidium tamariscinum</i>	A moss		4
VASCULAR PLANTS				
	<i>Acer campestre</i>	Field Maple		
	<i>Acer pseudoplatanus</i>	Sycamore		
	<i>Achillea millefolium</i>	Yarrow		
	<i>Agrostis stolonifera</i>	Creeping Bent - grass	Very local.	
	<i>Anacamptis pyramidalis</i>	Pyramidal Orchid	A few scattered plants.	
	<i>Angelica sylvestris</i>	Wild Angelica	By the entrance.	
	<i>Armoracia rusticana</i>	Horseradish		
	<i>Artemisia vulgaris</i>	Mugwort		
	<i>Bellis perennis</i>	Daisy		
	<i>Blackstonia perfoliata</i>	Yellowwort		
	<i>Brachypodium sylvaticum</i>	Wood Tor - grass		
	<i>Brassica nigra</i>	Black Mustard		

<i>Buddleja davidii</i>	Butterfly Bush	Naturalised.
<i>Calystegia sepium</i>	Bellbine / Hedge Bindweed	
<i>Carex flacca</i>	Glaucous sedge	3 - 4 small areas of occurrence.
<i>Carex hirta</i>	Hairy Sedge	
<i>Carex otrubae</i>	False Fox - sedge	2 - 3 plants.
<i>Carex pendula</i>	Pendulous Sedge	
<i>Centaureum erythraea</i>	Red Centaury	
<i>Cirsium arvense</i>	Creeping Thistle	
<i>Cirsium palustre</i>	Marsh Thistle	In wetter areas.
<i>Cirsium vulgare</i>	Spear Thistle	
<i>Clematis vitalba</i>	Old Man's Beard	
<i>Conium maculatum</i>	Hemlock	
<i>Crataegus monogyna</i>	Hawthorn	Common.
<i>Dactylis glomerata</i>	Cocksfoot Grass	
<i>Dactylorhiza fuchsii</i>	Common Spotted Orchid	Widespread and common.
<i>Daucus carota</i>	Wild Carrot	Widespread and common.
<i>Deschampsia cespitosa</i>	Tufted Hair Grass	Local.
<i>Dipsacus fullonum</i>	Fuller's Teazel	
<i>Elytrigia repens</i>	Common Couch	
<i>Epilobium ciliatum</i>	American Willowherb	
<i>Epilobium hirsutum</i>	Great Hairy Willowherb	
<i>Epilobium montanum</i>	Willowherb	
<i>Equisetum arvense</i>	Field Horsetail	
<i>Equisetum telmateia</i>	Wood Horsetail	By the entrance.
<i>Eupatorium cannabinum</i>	Hemp Agrimony	
<i>Filipendula ulmaria</i>	Meadowsweet	
<i>Foeniculum vulgare</i>	Fennel	A few scattered plants.
<i>Fraxinus excelsior</i>	Ash	
<i>Galium aparine</i>	Goosegrass	
<i>Galium mollugo</i>	Hedge Bedstraw	
<i>Geranium dissectum</i>	Cut-leaved Cranesbill	
<i>Geranium robertianum</i>	Herb Robert	
<i>Geum urbanum</i>	Herb Bennett	
<i>Glechoma hederacea</i>	Ground Ivy	
<i>Hedera helix</i>	Ivy	Common under scrub.

<i>Heracleum sphondylium</i>	Hogweed	
<i>Hieracium</i> sp.	Unidentified Hawkweed	
<i>Hippocrepis comosa</i>	Horseshoe Vetch	One or two plants on chalk spoil.
<i>Holcus lanatus</i>	Yorkshire Fog	
<i>Hypericum perforatum</i>	Perforate St John's Wort	
<i>Hypericum tetrapterum</i>	Square - stemmed St John's Wort	
<i>Juncus effusus</i>	Soft Rush	
<i>Juncus inflexus</i>	Hard Rush	
<i>Juncus x diffusus</i>	Soft Rush / Hard Rush hybrid	
<i>Lapsana communis</i>	Nipplewort	
<i>Lathyrus latifolius</i>	Everlasting Pea	
<i>Lathyrus nissolia</i>	Grass Vetchling	
<i>Lathyrus pratensis</i>	Yellow Vetchling	
<i>Lepidium draba</i>	Thanet Weed	
<i>Leucanthemum vulgare</i>	Ox Eye	
<i>Linaria purpurea</i>	Purple Toadflax	A few scattered plants.
<i>Linaria vulgaris</i>	Common Toadflax	
<i>Lotus corniculatus</i>	Birdsfoot Trefoil	
<i>Malus domestica</i>	Domestic Apple	
<i>Medicago lupulina</i>	Black Medick	
<i>Melilotus alba</i>	White Melilot	
<i>Melilotus officinalis</i>	Yellow Melilot	
<i>Myosotis arvensis</i>	Field Forgetmenot	
<i>Ononis repens</i>	Creeping Restharrow	
<i>Picris echoides</i>	Bristly Oxtongue	
<i>Picris hieracioides</i>	Hawkweed Oxtongue	
<i>Plantago lanceolata</i>	Ribwort Plantain	
<i>Plantago major</i>	Common Plantain	
<i>Potentilla anserina</i>	Silverweed	
<i>Potentilla reptans</i>	Creeping Cinquefoil	
<i>Prunella vulgaris</i>	Selfheal	
<i>Prunus spinosa</i>	Blackthorn	Formerly dominant over much of the site.
<i>Pulicaria dysenterica</i>	Fleabane	
<i>Quercus robur</i>	Oak	A few small trees.
<i>Rosa canina</i>	Dog Rose	

	<i>Rubus fruticosus</i>	Blackberry	Formerly dominant over much of the site.	
	<i>Rumex conglomeratus</i>	Branched Dock		
	<i>Rumex crispus</i>	Curled Dock		
	<i>Rumex obtusifolius</i>	Broad Dock		
	<i>Salix capraea</i>	Goat Willow		
	<i>Sambucus nigra</i>	Elderberry		
	<i>Scrophularia nodosa</i>	Figwort		
	<i>Sedum album</i>	White Stonecrop	On road plantings.	
	<i>Sedum anglicum</i>	Biting Stonecrop	On road plantings.	
	<i>Senecio jacobaea</i>	Ragwort		
	<i>Senecio vulgaris</i>	Groundsel		
	<i>Sinapis arvensis</i>	Charlock		
	<i>Sonchus asper</i>	Prickly Sowthistle		
	<i>Tamus communis</i>	Black Bryony		
	<i>Taraxacum officinale agg.</i>	Dandelion		
	<i>Thelycrania sanguinea</i>	Dogwood		
	<i>Torilis japonica</i>	Upright Hedge Parsley		
	<i>Tragopon pratensis</i>	Goatsbeard		
	<i>Trifolium campestre</i>	Hop Trefoil		
	<i>Trifolium dubium</i>	Common Yellow Trefoil		
	<i>Trifolium pratense</i>	Red Clover		
	<i>Trifolium repens</i>	White Clover		
	<i>Ulmus sp.</i>	Elm	Probably U. procera. By entrance.	
	<i>Urtica dioica</i>	Stinging Nettle		
	<i>Viburnum opulus</i>	Guelder Rose		
	<i>Vicia sepium</i>	Bush Vetch		108
CRUSTACEA ISOPODA				
	<i>Armadillidium vulgare</i>	Pillbug		
	<i>Oniscus asellus</i>	A woodlouse		
	<i>Porcellio scaber</i>	A woodlouse		
	<i>Trichoniscus pusillus</i>	A woodlouse		4
MYRIAPODA CHILOPODA				
	<i>Lithobius forficatus</i>	A centipede		
	<i>Lithobius variegatus</i>	A centipede		2
INSECTA; COLEOPTERA				

	<i>Abax ater</i>	A ground beetle		3
	<i>Carabus violaceus</i>	A ground beetle		
	<i>Notiophilus biguttatus</i>	A ground beetle		
INSECTA DIPTERA				
	<i>Phytomyza ranunculi</i>	A leaf - mining fly	Mines in buttercup leaves.	4
	<i>Syrphus ribesii</i>	A hoverfly		
	<i>Syrphus vitripennis</i>	A hoverfly		
	<i>Volucella zonaria</i>	A hoverfly		
INSECTA : HEMIPTERA - HETEROPTERA				
	<i>Calocoris norvegicus</i>	Potato capsid		12
	<i>Coreus marginatus</i>	Dock Bug	On broad dock.	
	<i>Dicyphus epilobii</i>	A heteropteran bug	On great hairy willowherb.	
	<i>Eysarcoris fabricii</i>	A heteropteran bug		
	<i>Heterotoma merioptera</i>	A heteropteran bug		
	<i>Liocoris tripustulatus</i>	Nettle Bug	On stinging nettle.	
	<i>Notostira elongata</i>	Grass Bug		
	<i>Pentatoma rufipes</i>	Forest Bug		
	<i>Phytocoris ulmi</i>	A heteropteran bug		
	<i>Piezodurus lituratus</i>	Gorse Bug		
	<i>Pithanus maerkeli</i>	A heteropteran bug		
	<i>Tingis cardui</i>	Spear thistle Lace bug		
INSECTA : HYMENOPTERA				
	<i>Bombus lapidarius</i>	Red - tailed Bumble Bee	Occasional workers seen.	7
	<i>Bombus pascuorum</i>	A bumble - bee	Workers seen.	
	<i>Bombus terrestris</i>	Buff-tailed Bumble Bee	Workers seen.	
	<i>Diplolepis rosea</i>	Rose Bedeguar	Galls on dog rose.	
	<i>Dolichovespula vulgaris</i>	Common wasp		
	<i>Lasius flavus</i>	Common Yellow Ant		
	<i>Lasius niger</i>	Common Black Ant		
INSECTA LEPIDOPTERA				
	<i>Abraxas grossulariata</i>	Magpie Moth		
	<i>Eupithecia vulgata</i>	Common Pug		
	<i>Euproctis chrysorrhoea</i>	Brown Tail		
	<i>Euxoa nigricans</i>	Garden Dart		
	<i>Gonepteryx rhamni</i>	Brimstone		



INSECTA: NEUROPTERA	<i>Inachis io</i>	Peacock	Bred on site.	
	<i>Maniola jurtina</i>	Meadow Brown		
	<i>Melanargia galathea</i>	Marbled White	Breeding in grass.	
	<i>Opisthograptis luteolata</i>	Brimstone Moth		
	<i>Pararge aegeria</i>	Speckled Wood		
	<i>Philudoria potatoria</i>	Drinker Moth		
	<i>Pieris brassicae</i>	Large White		
	<i>Pieris rapae</i>	Small White		
	<i>Plusia gamma</i>	Silver Y		
	<i>Polyommatus icarus</i>	Common Blue		
	<i>Pyronia tithonus</i>	Gatekeeper		
	<i>Stigmella aurella</i>	Golden Pygmy	Mines in bramble leaves.	
	<i>Thymelicus silvestris</i>	Small Skipper		
	<i>Vanessa atalanta</i>	Red Admiral		
	<i>Vanessa cardui</i>	Painted Lady	One imago.	
	<i>Zygaena filipendulae</i>	Six - spot Burnet moth		21
INSECTA : ORTHOPTERA	<i>Chrysopa carnea</i>	A lacewing		
	<i>Panorpa cognata</i>	A scorpion fly		2
ARACHNIDA	<i>Chorthippus brunneus</i>	Field Grasshopper		
	<i>Chorthippus parallelus</i>	Meadow Grasshopper		
	<i>Leptophyes punctatissima</i>	Speckled Bushcricket		
	<i>Pholidoptera griseoaptera</i>	Dark Bushcricket		4
MOLLUSCA	<i>Aceria macrochelus</i>	Field maple - leaf gall mite		
	<i>Araneus diadematus</i>	A spider		
	<i>Mitopus morio</i>	A harvest spider		
	<i>Phalangium opilio</i>	A harvest spider		
	<i>Phyllocoptes goniorthoras</i>	A gall - mite	On hawthorn leaves.	5
	<i>Arion ater</i>	Garden Slug		
	<i>Cepaea nemoralis</i>	Grove Snail		
	<i>Cernuella virgata</i>	A land snail		
	<i>Deroceras reticulatum</i>	Milky Slug		

REPTILIA	<i>Helix aspersa</i>	Garden snail		8
	<i>Monacha cantiana</i>	Kentish Snail		
	<i>Trichia striolata</i>	Strawberry Snail		
	<i>Vitraea sp</i>	A glass snail		
	<i>Anguis fragilis</i>	Slow Worm	Widespread.	2
	<i>Zootoca vivipara</i>	Common Lizard	Local.	
BIRDS	<i>Aegithalos caudatus</i>	Long - tailed Tit	Has nested.	20
	<i>Carduelis carduelis</i>	Goldfinch	Feeding on site.	
	<i>Carduelis chloris</i>	Greenfinch	Feeding on site.	
	<i>Columba palumbus</i>	Woodpigeon	Has nested.	
	<i>Corvus corone</i>	Carrion Crow	Flying over.	
	<i>Corvus monedula</i>	Jackdaw	Feeding on site.	
	<i>Erithacus rubecula</i>	Robin	Males singing.	
	<i>Fringilla coelebs</i>	Chaffinch	Males singing.	
	<i>Larus argentatus</i>	Herring Gull	Flying over.	
	<i>Larus ridibundus</i>	Black - headed Gull	Flying over.	
	<i>Motacilla alba</i>	Pied Wagtail	Feeding on site.	
	<i>Parus caeruleus</i>	Blue Tit	Feeding on site.	
	<i>Passer domesticus</i>	House Sparrow	Feeding on site.	
	<i>Pica pica</i>	Magpie	Feeding on site.	
	<i>Prunella modularis</i>	Dunnock	Has nested.	
	<i>Sylvia atricapilla</i>	Blackcap	Has nested.	
	<i>Sylvia communis</i>	Common Whitethroat	Has nested.	
	<i>Troglodytes troglodytes</i>	Wren	Has nested.	
	<i>Turdus merula</i>	Blackbird	Has nested.	
	<i>Turdus pilaris</i>	Fieldfare	Feeding on site.	
MAMMALS	<i>Erinaceus europaeus</i>	Hedgehog		
	<i>Meles meles</i>	Badger	Small sett present.	
	<i>Oryctolagus cuniculus</i>	Rabbit		
	<i>Pipistrellus pipistrellus</i>	45 kHz Pipistrelle	Feeding on site.	
	<i>Rattus norvegicus</i>	Brown Rat		

*Talpa europaea*

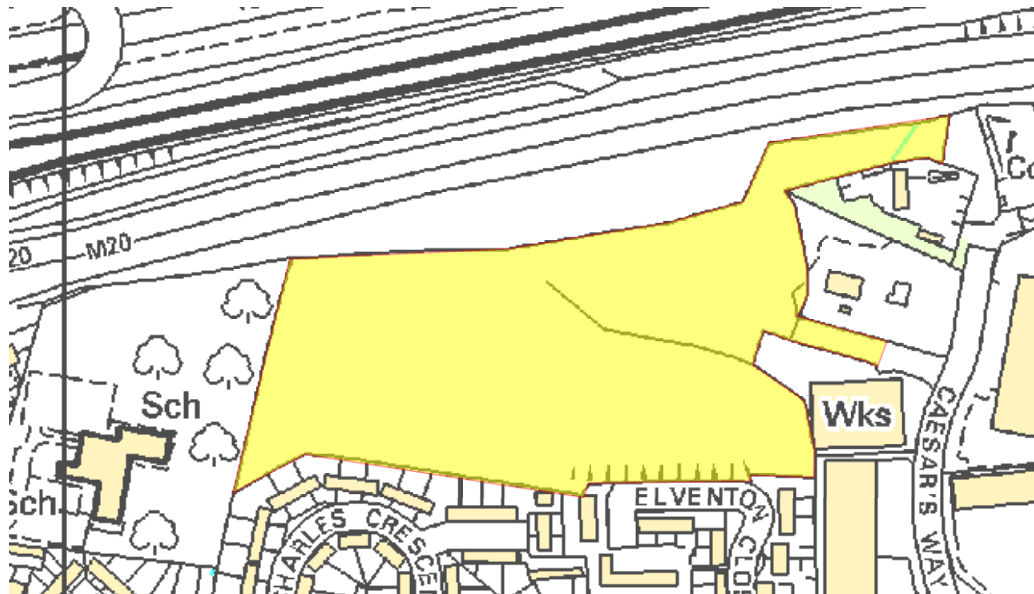
Mole

*Vulpes vulpes*

Fox

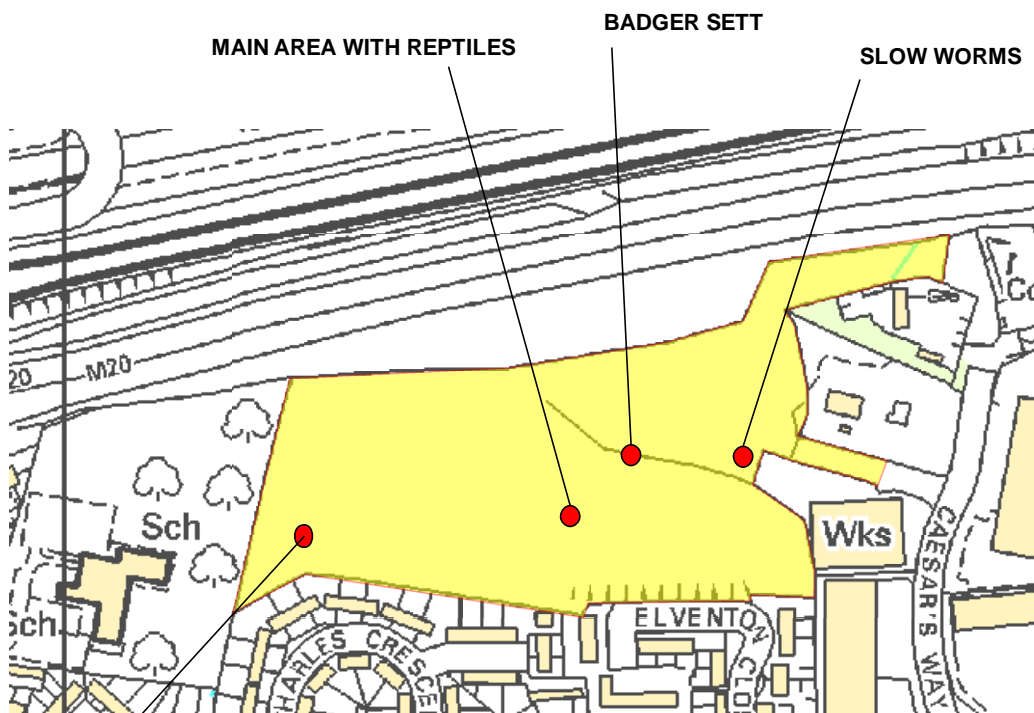
7

**Total number of species: 225**



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**FIGURE 1: THE APPROXIMATE EXTENT OF THE SURVEY AREA.**



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**POTENTIAL BAT TREES**

**FIGURE 2: LOCATION OF THE MAIN POINTS OF INTEREST.  
(All data approximate).**





**FIGURE 3: A GENERAL VIEW OF THE SITE.**  
**This is in the area nearest to the motorway which is about 40% of the site and which is subject to winter flooding.**



**FIGURE 4: A CLOSER VIEW OF THE VEGETATION.**





**FIGURE 5: THE DEAD TREES THAT WERE THOUGHT TO HAVE BAT POTENTIAL.**



**FIGURE 6: PART OF ONE OF THE RETAINED REPTILE AREA CONTRASTED WITH THE MAINTAINED AND SCRUB - CLEAR PART OF THE SITE.**  
**The area with the scrub and white wild carrot flowers is where the reptiles are living and was originally a clearing in dense scrub.**