ELEVEN ACRE SHAW REDBROOK STREET WOODCHURCH KENT ECOLOGICAL SCOPING SURVEY

BY

MARTIN NEWCOMBE

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D135. Woodchurch (TQ942359)R.



Martin Newcombe Wildlife Management Consultancy 01233 720229

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1.0 INTRODUCTION

- 1.1 This document was compiled in order to report upon a bat building and protected species scoping survey of Eleven Acre Shaw, Redbrook Street, Woodchurch, Kent¹. The site is a level one on clay sand soil at approximately 52 metres OD. The site is located approximately one kilometre north west of Woodchurch.
- 1.2 The **site** basically consists of a belt of woodland alongside Redbrook Street, with a parallel belt of improved mown grassland further south. At the western end is a former hard surfaced revegetating yard with some corrugated iron buildings which are in a state of disrepair. In the centre of the site a trackway leads off Redbrook Street and head southwards through the woodland before splitting. One branch runs to the yard in the west, whilst the other leads to a similar yard in the eastern half of the site. In the easternmost part of the latter yard there is a small block built building, with another one further south on the margin of the grassland. There is also a small caravan in the same area².
- 1.3 The **surrounding area** is rural with scattered settlements. Redbrook Street forms the northern boundary, beyond which are some fishing ponds and scattered houses. Redbrook Street crosses Bethersden Road with the junction adjoining the north eastern corner of the survey site. There is a large poultry farm to the south whilst the western boundary adjoins arable land.
- 1.4 The site is approximately 380 metres north east of the nearest ancient woodland, and there are other areas of ancient woodland located at approximately 390 metres to the south west and 780 metres to the north west; the latter forms part of the Engeham Farm / Shirkoak Local Wildlife Site³. There are no other **designated sites** within one kilometre of the survey site.

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¹ OS / TQ942359. Grid reference taken from http://gridreferencefinder.com/#

² Which was ignored during the course of the survey. The details of the other three buildings are in Appendix 2.

³ Hereafter 'LWS'. LWS are protected against development at a local (county) level.

2.0 METHODS

- **2.1** The site **visit** took place on Friday 4th May 2018 and took approximately one and a half hours, during which time the whole site was visited. The purpose of the visit was to carry out ecological scoping surveys as follows:
- **2.1.1** A Phase 1 habitat survey of the type described by Nature Conservancy Council (1990) was carried out.
- **2.1.2** The plant and animal **species** of the site were listed by using the variety of inventory methods described by Sutherland (2000) and Beattie and Oliver (1994) and are given in Appendix 1. Obviously introduced species of plants were not included in this list.
- **2.1.3** A search was made for any species, or habitat suitable for any species that are specifically **protected** for conservation purposes by wildlife legislation⁴ such as badgers⁵, bats and common reptiles⁶, 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.
- 2.1.4 A search was also made for species⁷ that are included within the short list of the national Biodiversity Action Plans and associated lists⁸, and, for birds, a search was made for species which are included within the red part of the national bird 'Red List'⁹ as well as any other species that were recorded within the Kent Red Data Book¹⁰, Kent Rare Plant Register¹¹ and other similar publications.
- **2.1.5** The **method** used for the **bat survey** of the buildings was a visual assessment of the quality of possible roost sites based on the descriptions of bat roosts given by Hundt (2012), Collins (2016), Corbet and Harris (1991), Harris and Yalden (2008),

⁴ Mostly, this included species listed in http://jncc.defra.gov.uk/page-3408 as being protected by the Wildlife and Countryside Act 1981 and related legislation.

⁵ Meles meles.

⁶ E.g. common lizard (Zootoca vivipara), grass snake (Natrix helvetica) and slow – worm (Anguis fragilis). ⁷Or habitat suitable for species.

⁸ Biodiversity Steering Group, 1995 as amended. Hereafter known as the 'BAP'. Also, the species subject of Biodiversity 2020 (https://www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-ecosystem-services).

⁹ Hayhow et al. (2017).

¹⁰ Waite, 2001. Hereafter referred to as 'KRDB'.

¹¹ http://bsbi.org/kent

Mitchell - Jones and McLeish (2004) and Ransome (1990) as enhanced by extensive personal previous experience. Other methods which were also used included:

- The use of a portable ladder to check interior and exterior surfaces, including joints, cracks and other cavities.
- The use of an endoscope, mirrors, a Flir E60 thermal imager and similar equipment to check cracks and cavities, including those between joints etc.
- Searching for bat droppings on flat surfaces, walls and floors, in spiders' webs and on artefacts. These, if found, would be subsequently identified using experience, a reference collection and Stebbings, Yalden and Herman's (2007) descriptions, or DNA examination if required.
- Checking for signs of bat entry points.
- Checking for signs of bat feeding points e.g. piles of insect wings.
- Where access was difficult or dangerous, photographs of parts of the site were taken and subsequently checked and / or binoculars were used to scan potential roost sites.
- Other methods as appropriate.

All results of the bat building survey were recorded in Appendix 2.

3.0 RESULTS

- **3.1** The Phase 1 **habitat survey** is shown as Figure 2.
- **3.2** The following evidence of any species, or habitat suitable for any species which are specifically **protected** under wildlife legislation was found on the site;
 - The woodland in the northern half of the site was considered as possible habitat for dormouse¹².
 - There was no evidence of **bats** in the buildings due to the absence of suitable habitat, but there were three potential roosting sites for bats:
 - An oak tree on the west side of the entrance drive, close to where it turned westwards.
 - o A dead oak tree north east of the westernmost yard.
 - A row of poplars, some of which were old enough and either possessed cavities or holes that might hold bats.
- **3.3** No evidence of the presence of other **BAP**, KRDB or other notable species was found on site.

¹² Muscardinus avellanarius.

4.0 DISCUSSION AND CONCLUSIONS

- **4.1** Short surveys such as this one are good at giving a sample of the ecological value of a given site and showing which species, if any, require more detailed survey¹³.
- 4.2 The **methods** of the survey have been used extensively elsewhere with consistent results and accord with good practice guidelines¹⁴. Signs of protected species and their habitat parameters are reasonably obvious to an experienced surveyor and ecological surveys of this type are valuable in terms of helping to determine whether protected or notable animals or plants are likely to be present, are present, or have been present in or around a site and whether further, more detailed Phase 2 survey is required for certain species. However, the results of a survey are partially determined by the time of year at which the survey takes place, the stages in an organism's life cycle, and the accessibility of the site. At this site, access was complete except for building 2, which could not be inspected internally.
- 4.3 The **plant** list was typical of the flora which is found in similar such areas throughout this part of the county. There were no unusual or uncommon or protected plant species at the site, although the woodland belt in the north of the site was clearly a remnant of ancient woodland. It contained eight species of Ancient Woodland Indicator plant of the type listed by Rose (1999)¹⁵. The habitat type of the grassland overall was probably largely Rodwell's (1998) MG7 *Lolio Plantaginion* ley. This is a common habitat type which is widespread throughout the country¹⁶. The habitat type of the woodland was the same author's (1991) W10 *Quercus robur Pteridium aquilinum Rubus fruticosus* woodland.
- 4.4 No notable species of **birds** were recorded at the site. A few additional species¹⁷ might be expected to occur on or over the site at other times of year. There were abundant nesting sites present in the survey area in the woodland and scrub, and to a limited extent in the buildings. No vegetation clearance or any demolition of any of the buildings, therefore, should take place between March to July inclusive when birds are nesting, unless a contemporary survey reveals that no breeding birds are present.

¹³ Stork and Samways, 1995.

¹⁴ E.g. Chartered Institute of Ecology and Environmental Management, 2013: British Standards Institute, 2013, Collins, 2016.

¹⁵ These are listed in Appendix 1.

¹⁶ Rodwell, 1991.

¹⁷ E.g. Great spotted woodpecker (Dendrocopos major) and starling (Sturnus vulgaris).

- **4.5 Bat** evidence was not found in any of the buildings. Overall the buildings were structurally unsuitable for bats roosting purposes, and / or insufficiently oriented to allow heating by insolation, and it is probably these two factors which primarily mitigated against their use by bats.
- 4.6 Of the three trees which were considered to be suitable for roosting bats, the oak tree on the western side of the entrance trackway was most suitable and was a category 1 tree as defined by Hundt (2012), whilst the second oak was the same. The row of poplars consisted of numerous trees, of which perhaps only five or six were potential bat roosts and were in Hundt's category 2.
- 4.7 Consideration was also given to a wide range of other protected species that might occur on site, but none were found. There was no suitable habitat on the site which was suitable for reptiles, because the site lacked sufficient vegetation of the right type and density. There were several trees of sufficient age, size, girth and condition that might provide habitat for stag beetle¹⁸, but no evidence of stag beetle was found. There were no badger setts or badger field signs.
- **4.8** In addition, no development proposals for the survey site will affect the Ancient Woodland area or the nearby LWS¹⁹.
- 4.9 The possibility of **dormouse** being present in the wood was considered, especially as it had links via the roadside hedge with other sites nearby. Dormouse is known to occur in this area²⁰ but it is understood that the woodland will be left untouched, and if suitable habitat enhancements are carried out, it could provide better habitat for this and other species. There would thus be no impact on dormice from any development, and there might even be a slight improvement if mitigation were affected.
- **4.10** The site had no ponds which might hold **great crested newts**²¹. However, there were approximately 33 ponds of varying suitability within one kilometre of the site, with the nearest pond being only approximately 72 metres north east of the site but on the other side of the Bethersden Road / Redbrook Street junction. The woodland of the site is potentially good terrestrial habitat for newts; no Habitat Suitability Index²² for great crested newt of the type described by Oldham et al

¹⁸ Lucanus cervus.

¹⁹ Which is inaccessible except by permission of the owner.

²⁰ Personal observation.

²¹ Triturus cristatus.

²² Hereafter 'HSI'.

(2000) was calculated for any of the neighbouring ponds, but great crested newts are known to be common in this part of the Weald, so it is likely that they are present in the surrounding area. Although further survey for this species may be required, given the fact that the chicken farm to the south affords a significant barrier to this species from a pond to the south it may be possible to take reasonable avoidance measures instead, which will require a written site - specific method statement.

4.11 In **summary**, therefore, no potential breeding bird habitat should be cleared between late March to the end of July. There is no potential for protected species on site except for the possibility of great crested newts crossing the site from nearby ponds, but although the need for survey of nearby ponds cannot be ruled out, it may be possible, given the absence of ponds on the site, to take reasonable avoidance measures instead. No other protected species, or habitat for protected species was found. It is, however, strongly recommended that, in order to accord with the National Planning Policy Framework²³ and to provide some positive ecological benefits, some of the wildlife conservation measures suggested by Gunnell, Murphy and Williams (2013) for instance, for the built environment should be incorporated into any proposed Scheme by means of a biodiversity plan for any completed development. Such measures could include the provision of bird²⁴ and bat boxes, a scheme of native species landscaping and similar measures, and should also include a plan for the long – term management of the ancient woodland to ensure that it retains and enhances its present character.

²³ Department of Communities and Local Government, 2012.

²⁴ Especially sparrow terraces.

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	X 1: LIST OF SPECIES RECORDED			NO
	SCIENTIFIC NAME	VERNACULAR NAME	NOTES	SPP
ALL FUNGI				
	Armillaria mellea	Honey Fungus		
	Calocybe gambosa	St. George's Mushroom		
	Fistulina hepatica	Poor Man's Beefsteak	On oak.	
	Piptoporus betulinus	Birch Bracket		4
LICHENS				
	Evernia prunastri	A lichen		
	Lecanora campestris	A lichen		
	Xanthoria parietina	A lichen		3
MOSSES				
	Brachythecium rutabulum	A moss		
	Bryum sp.	A moss		
	Mnium hornum	A moss		
	Thuidium tamariscinum	A moss	Other species present.	4
VASCULAR PLANTS				
	Acer campestre	Field Maple	Ancient woodland indicator plant.	
	Acer pseudoplatanus	Sycamore		
	Alliaria petiolata	Hedge Garlic		
	Anemone nemorosa	Wood Anemone	Ancient woodland indicator plant.	
	Anthriscus sylvestris	Cow Parsley		
	Arctium lappa	Greater Burdock		
	Arrhenatherum elatius	False Oat - grass		
	Artemisia vulgaris	Mugwort		
	Arum maculatum	Cuckoo Pint		
	Betula pendula	Silver Birch		
	Cardamine pratensis	Cuckoo Flower		
	Cardamine hirsuta	Hairy Bittercress		
	Carex pendula	Pendulous Sedge	Ancient woodland indicator plant.	
	Carpinus betulus	Hornbeam	Ancient woodland indicator plant.	

Cerastium glomeratum	Sticky Mouse - ear	
Cirsium arvense	Creeping Thistle	
Cirsium vulgare	Spear Thistle	
Conium maculatum	Hemlock	
Corylus avellana	Hazel	
Crataegus monogyna	Hawthorn	
Crocosmia x crocosmiflora	Montbretia	
Dactylis glomerata	Cocksfoot Grass	
Digitalis purpurea	Foxglove	
Dipsacus fullonum	Fuller's Teazel	
Epilobium hirsutum	Great Hairy Willowherb	
Festuca rubra	Red Fescue	
Ficaria verna	Lesser Celandine	
Fraxinus excelsior	Ash	
Galium aparine	Goosegrass	
Geranium dissectum	Cut-leaved Cranesbill	
Geranium robertianum	Herb Robert	
Geum urbanum	Herb Bennett	
Glechoma hederacea	Ground Ivy	
Hedera helix	lvy	
Heracleum sphondylium	Hogweed	
Hieracium sp.	Unidentified Hawkweed	
Holcus lanatus	Yorkshire Fog	
Hordeum murinum	Wall Barley	
Hyacinthoides non - scripta	a Bluebell	Ancient woodland indicator plant.
llex aquifolium	Holly	Ancient woodland indicator plant.
Iris foetidissima	Stinking Iris	Ancient woodland indicator plant.
Lamium purpureum	Red Deadnettle	
Lapsana communis	Nipplewort	
Lolium perenne	Rye Grass	
Lonicera periclymenum	Honeysuckle	
Melissa officinalis	Lemon Balm	Garden escape?
Myosotis arvensis	Field Forgetmenot	
Pentaglottis sempervirens	Green Alkanet	

	Phleum pratense	Timothy Grass		
	Picris echoides	Bristly Oxtongue		
	Picris hieracioides	Hawkweed Oxtongue		
	Plantago coronopus	Buck's horn Plantain		
	Plantago lanceolata	Ribwort Plantain		
	Plantago major	Common Plantain		
	Potentilla reptans	Creeping Cinquefoil		
	Primula vulgaris		Ancient woodland indicator plant.	
	Prunella vulgaris	Selfheal	·	
	Quercus robur	Oak		
	Ranunculus repens	Creeping Buttercup		
	Rosa canina	Dog Rose		
	Rubus fruticosus agg.	Blackberry		
	Rumex acetosa	Sorrel	7	
	Rumex crispus	Curled Dock		
	Rumex obtusifolius	Broad Dock		
	Sagina apetala agg.	Procumbent Pearlwort	10.	
	Salix capraea	Goat Willow		
	Sambucus nigra	Elderberry	4	
	Scrophularia nodosa	Figwort	-	
	Senecio jacobaea	Ragwort		
	Sonchus asper	Prickly Sowthistle		
	Stellaria holostea	Greater Stitchwort		
	Stellaria media	Chickweed		
	Taraxacum officinale agg.	Dandelion		
	Trifolium sp.	Unidentified Clover		
	Urtica dioica	Stinging Nettle		
	Verbascum thapsus	Giant Mullein		
	Veronica chamaedrys	Birdseye Speedwell		
	Veronica persica	Common Field Speedwell		
	Veronica serpyllifolia	Thyme - leaved Speedwell		79
CRUSTACEA ISOPODA				
	Armadillidium vulgare	Pillbug		
	Oniscus asellus	A woodlouse		2

INSECTA DIPTERA				
	Diplolepis iilicis	A gall - fly	In holly leaves.	
	Phytomyza ranunculi	A leaf - mining fly	In buttercup leaves.	2
INSECTA: HYMENOPTERA				
	Bombus muscorum	A bumble - bee		
	Bombus terrestris	Buff-tailed Bumble Bee		
	Lasius flavus	Common Yellow Ant		
	Lasius niger	Common Black Ant		4
INSECTA LEPIDOPTERA				
	Anthocharis cardamines	Orange - tip		
	Inachis io	Peacock		2
MOLLUSCA				
	Helix aspersa	Garden snail		1
BIRDS				
	Carduelis carduelis	Goldfinch		
	Columba palumbus	Woodpigeon	Nests found.	
	Cyanistes caeruleus	Blue Tit	Breeding.	
	Erithacus rubecula	Robin	Singing males.	
	Fringilla coelebs	Chaffinch		
	Parus major	Great Tit		
	Phylloscopus collybita	Chiffchaff	Singing male.	
	Prunella modularis	Dunnock	Breeding.	
	Sylvia atricapilla	Blackcap	Singing male.	
	Troglodytes troglodytes	Wren	Nests found.	
	Turdus merula	Blackbird		11
MAMMALS	•		·	•
	Oryctolagus cuniculus	Rabbit		1
			Total number of species:	113

APPENDIX 2: BUILDING ASSESSMENT FOR BATS (nb. All data approximate)

Name of owner: Clyde Chapman.

Survey commissioned by: Patrick Durr Associates.

Address of site: Eleven Acre Shaw, Redbrook Street, Woodchurch, Kent.

OS grid reference: TQ942359
Date: 4th May 2018
Surveyor: Martin Newcombe

Building type: Store Store Current use: Storage Storad Storage Storad Storage Storad Storage Storad Storage Storad Sto	Surveyor:	Martin Newcombe			
Current use: Storage Storage Storage Storage (disused) Age: Late 20th century? Late 20th century? Late 20th century? Late 20th century? Condition Good. Good Good In need of repair. Storeys: Ground floor only. Ground floor only. Ground floor only. Ground floor only. Attic present? Absent. Absent Absent Absent Cellar present? Absent. Absent Absent Absent Any wooden joints with potential for bats? Absent. Absent Absent Absent Any cavities in brick or stone work suitable for bats? Absent. Absent Absent Absent Any cavities in brick or stone work suitable for bats? Absent. Absent Absent Absent Any cavities in brick or stone work suitable for bats? Absent. Absent Absent Absent Any cavities in brick or stone work suitable for bats? Absent. Absent Absent Absent Any cavities in brick or stone work suitable for bats. Absent. Absent	Building no.:	1	2	3	
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Suitable for bats? Absent. Absent Absent	, , , , , , , , , , , , , , , , , , , ,	Absent.	Absent	Absent	
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Summary bat status:Building structure and position unsuitable for bats.Building structure and position unsuitable for bats.Building structure and position unsuitable for bats.		Absent.	Probably absent	Absent	
unsuitable for bats. unsuitable for bats. unsuitable for bats.	Droppings:				
Constraints on survey: Absent. Interior not surveyed. Absent	Summary bat status:				
	Constraints on survey:	Absent.	Interior not surveyed.	Absent	



Figure 1: A MAP OF THE SITE WHICH IDENTIFIES THE BUILDINGS MENTIONED

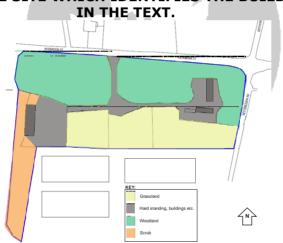


Figure 2: PHASE 1 HABITAT SURVEY OF THE SITE.



Figure 3: A TYPICAL VIEW OF THE INTERIOR OF THE ANCIENT WOODLAND.



Figure 4: THE INTERIOR OF BUILDING 1.



Figure 5: BUILDING 2 VIEWED FROM THE OUTSIDE.



Figure 6: THE GRASSLAND.



Figure 7: THE OAK TREE ON THE WESTERN SIDE OF THE ENTRANCE TRACKWAY.



Figure 8: THE DEAD OAK TREE NORTH - EAST OF THE WESTERNMOST YARD.



Figure 9: THE WESTERNMOST YARD.



Figure 10: PART OF BUILDING 3.



Figure 11: ONE OF THE POPLARS SHOWING THE CRACKED BARK.