

Fairytale Farm, Southcombe Preliminary Ecological Appraisal & Roost Assessment

On Behalf of:
Nick Laister

Issue No.	1
Issue Date	07/01/2024
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1. Executive Summary

- 1.1 Faitytale Farm is located in the civil parish of Enstone within the West Oxfordshire District of the county of Oxfordshire (Central Grid Reference SP 33702710).
- 1.2 There are plans to replace the current dwelling with one designed to modern standards and to cater for disabled access. Therefore, a Preliminary Ecological Assessment (PEA) and Preliminary Roost Assessment (PRA) are required to help inform the planning decision.
- 1.3 The site consists of a detached two-storey house set in its own grounds with an access drive and parking, covering an area of approximately 0.22ha.
- 1.4 There are no ponds on the site, however there are two ponds within 500m of the site 300m south-west and 450m to the south, within Chipping Norton Golf Club, but due to the distance and the small scale of works GCN are not viewed as a constraint to the proposed re-development if a working method statement is employed.
- 1.5 The preliminary roost assessment carried out on the main house identified a low number of Brown Long-eared bat droppings in the roof space, along with a single Brown Long-eared bat. This is believed to be a minor roost and the work will be carried under a bat mitigation class licence, fully informed by bat emergence surveys in 2024.
- 1.6 Common garden birds were observed on the site. All active birds' nests are protected by law; any building, tree or scrub clearance must be undertaken using methods to avoid disturbance of nesting birds, which is set out in the recommendations section.
- 1.7 The amenity grassland, hard standing and shrubs and trees on the borders offer poor habitat for reptiles. Reptiles are considered to be absent from the site and are not viewed as a constraint to the proposed development.
- 1.8 No other protected or notable species were found on the site or are regarded as likely to use the common habitats found there.
- 1.9 A number of suggestions have been made to enhance the site for wildlife as proposed by the NPPF.

2. Introduction

Background

- 2.1 Fairytale Farm is located off of the A44 in the hamlet of Southcombe, 2km east of the town of Chipping Norton, in the civil parish of Enstone, which lies within the West Oxfordshire District of the county of Oxfordshire (Central Grid Reference SP33702710).
- 2.2 The site covers an area of approximately 0.22ha, consisting of a detached house, grassland, vegetable plot, hardstanding (in the form of an access drive and parking area) and scattered trees, hedges and shrubs.
- 2.3 There are plans to demolish the current dated property with a modern house designed for disabled access and to modern living and environmental standards. Therefore, a preliminary Ecological Assessment and Preliminary Roost Assessment are required to help inform the planning decision.
- 2.4 Nick Laister commissioned 4 Acre Ecology Limited on 30th July 2023 to undertake a Preliminary Ecological Assessment and Preliminary Roost Assessment to allow this report to be written.

Aims and Objectives

- 2.5 The aim of the survey was to determine the ecological value of the site and to assess possible ecological constraints that may be present on the site, suggesting any further surveys or mitigation required, with the objective of informing the planning decision, whilst maintaining the conservation status of the area.

About the Author

- 2.6 Mark Satinet has been working in the field of Wildlife Conservation and Ecology since 1992. 13 years at the Wildlife Trusts working on wider countryside habitat and species projects provided a good background in habitat surveys, species identification, habitat management advice to landowners and dealing with the public and media. He was the County Mammal Recorder for Wiltshire from 2000 to 2015, and set up the Wiltshire Mammal Group in 2005. He is also a voluntary Bat Warden for Natural England and has been an active member of the Wiltshire Bat Group since 2001.
- 2.7 Since 2005 he has been a consultant ecologist, first as a Senior Ecologist at a multi-disciplinary company for a year and then the Principal Ecologist running the ecology team in a specialised ecological firm for a further four years. He is a full member of the Chartered Institute of Ecology and Environmental Management and a Chartered Environmentalist. He now owns and runs his own company, 4 Acre Ecology Limited.

- 2.8 He holds disturbance licences for bats, Great Crested Newts, Dormice, Barn Owls and Shrews and has held development licences for Great Crested Newts, bats, Badgers and Dormice and holds both a Bat Mitigation Class Licence and Great Crested Newt Low Impact Class Licence.

3. Methodology

Desk Study

- 3.1 A data search was commissioned from the Thames Valley Environmental Records Centre (TVERC) for protected species within 1km of the site and bat species records within 2km of the site. Biological Records Centres hold information regarding statutory designated sites, local nature reserves, sites of conservation interest, records of protected species and other species of conservation concern. However, this data cannot be considered fully comprehensive and therefore the absence of data, in response to a data search, does not imply that a species, important habitat or designation does not exist within that search area.
- 3.2 The Multi-Agency Geographical Information for the Countryside (MAGIC) website was consulted to determine if there were any sites designated for bats within 5km of the site boundary, or any designated sites within 2km and what European Protected Species licences had been issued in the area along with GCN licence returns within 1km of the site.
- 3.3 The land within 500m of the site was examined through aerial/satellite images and on-line mapping tools to identify any likely ponds that may support Great Crested Newts (GCNs).

Field Survey

Extended Phase I Habitat Survey

- 3.4 An extended Phase I habitat survey (JNCC, 2010) was carried out across the site and up to 30m beyond its boundary to investigate the potential for badger setts. Phase I habitat survey is a standardised, rapid mapping technique for obtaining baseline ecological information over large areas of land. It uses standard habitat definitions for classifying areas of land based on the vegetation present. The technique was modified to provide more detail over a smaller area and give further consideration to the presence of fauna. The standard habitat definitions were used, with coarse grassland as an additional category to cover unmanaged, secondary grasslands that are species poor.
- 3.5 Easily identified higher plant species from each habitat type were recorded and their abundance was assessed on the DAFOR scale:

D	Dominant (81-100% Cover)
A	Abundant (61-80% Cover)
F	Frequent (41-60% Cover)
O	Occasional (21-40% Cover)
R	Rare (1-20% Cover)

- 3.6 This scale is only representative of the area covered within each habitat type on the site and does not reflect national, regional or local abundances. As plant cover is stratified total percentage cover by adding up the scale can easily be greater than 100%. The names of all species follow the *National Biodiversity Network's Species Dictionary*.
- 3.7 The site was examined for badgers and evidence of bats, but no other specific faunal surveys were undertaken. However, incidental records were made and the habitats identified on site were evaluated for their potential to support species of conservation interest, including protected and Biodiversity Action Plan (BAP) Priority species.

Preliminary Bat Survey

- 3.8 An external and internal inspection of the main house was made by a Natural England Licensed bat surveyor (Class Licence Number 2015-13769-CLS-CLS). The exterior of the building was searched for evidence of bats, looking for grease stains in external crevices and searching for droppings on windows sills, windows, walls and ledges and on the ground below potential entrance/exit areas to the roof or walls.
- 3.9 The interior of the building, and in particular the loft or roof spaces, were searched using high powered torches for evidence of bats. This evidence includes sightings, dead bats, feeding remains, smell, droppings and grease marks at entry/exit points.
- 3.10 The potential of the building as a bat roost was judged and any signs of bats or features offering roost potential were noted.

4. Legislation and Planning Policy

4.1 There are a number of tiers of legislation protecting wildlife in England and Wales. The highest tier is for those species protected by European Legislation, such as the Dormouse, Great Crested Newt, Otter and all species of bat. These are known as European Protected Species (EPS), which gain their protection from the Conservation of Habitats and Species Regulations (Habitat Regulations) 2017, whereby under section 43 it is an offence to

- deliberately capture, injure or kill an EPS
- deliberately disturb or take/destroy the eggs of an EPS
- damage or destroy a breeding site or resting place of an EPS

4.2 Nationally protected species are either fully protected (e.g. Water Vole) or partially protected (e.g. Adder or Smooth Newt) under the Wildlife and Countryside Act (WCA) 1981 and amendments, including the Countryside and Rights of Way Act (CRoW) 2000. Under the WCA it is an offence to:

- intentionally kill, injure or take any wild bird, take or destroy any wild bird egg or take, damage or destroy any nest while it is in use or being built
- intentionally or recklessly disturb any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or disturb dependent young of such a bird
- intentionally or recklessly at any other time take, damage, destroy or otherwise interfere with any nest habitually used by any wild bird included in Schedule A1
- intentionally or recklessly kill, injure or take from the wild or possess all or any part of a Schedule 5 species
- intentionally or recklessly damage or destroy any structure or place which a schedule 5 species uses for shelter or protection, or disturb a schedule 5 species while it is occupying such a place
- obstruct access to any structure or place which a schedule 5 species uses for shelter or protection
- intentionally pick, uproot or destroy any wild plant included in Schedule 8

4.3 The CRoW Act 2000 added the term recklessly after intentionally in the Wildlife and Countryside Act 1981 and introduced a maximum custodial sentence of 6 months for offences.

- 4.4 The Natural Environment and Rural Communities Act 2006 (NERC) made provision about bodies concerned with the natural environment and rural communities and in connection with wildlife, sites of special scientific interest, National Parks and the Broads. Section 41 established a list of the living organisms and types of habitat which in the Secretary of State's opinion are of principal importance for the purpose of conserving biodiversity. This is known as the UK Biodiversity Action Plan (BAP) list.
- 4.5 Under the Protection of Badgers Act 1992 it is an offence to wilfully kill, injure or take a Badger and damage, destroy or obstruct a badger sett, cause a dog to enter a Badger sett or disturb a badger while it is occupying a sett.
- 4.6 The National Planning Policy Framework (NPPF) updated in July 2018 states that Planning policies and decisions should contribute to and enhance the natural and local environment by:
- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
 - d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
 - e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
 - f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
- 4.7 To protect and enhance biodiversity and geodiversity, plans should:
- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and

b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

5. Results

Desk Study

- 5.1 The data search from the local Biological Records Centre has been summarised in the tables below, with Table 1 showing the sites of wildlife interest and Table 2 Ancient semi-natural woodland. Table 3 records notifiable and protected species recorded within 1km of the site and bat species within 2km.
- 5.2 Thames Valley Environmental Records Centre hold 7,435 protected species records within 1km of the site (7,346 of birds from the same site) and 98 bat species records within 2km of the site (See Table 3). Only those species which are Section 41/UK BAP species or are protected by UK/European law have been included in the table.
- 5.3 There is one site of national importance within 2km of the site. There are no Local Nature reserves within 2km of the site.
- 5.4 There have been 10 Protected Species Licences issued for bats within 5km of the site, covering the nine bat species of; Brown Long-eared, Common Pipistrelle, Natterer's, Daubenton's, Whiskered, Lesser Horseshoe, Greater Horseshoe, Leisler's and Soprano Pipistrelle. The nearest licence issued is 2.47km to the west of the site and involves a day roost of Common Pipistrelle.
- 5.5 There are no EPS licences for great Crested Newt within 1km of the site. There is one GCN Survey licence return for GCN 520m west of the site and two ponds within 500m, 300m to the south-west and 450m south.

Table 1. Sites of Wildlife Interest

Site Name	Grid Ref.	Area (ha)	Distance from Site	Direction from site	Description
European Importance					
-	-	-	-	-	-
National Importance					
Glyme Valley SSSI	SP340259	0.17	820m	South	Mixture of unimproved and semi-improved grassland at the head waters of the River Glyme. Due to the distance from the site and the small nature of the proposals on already developed land, no negative impacts are expected.
Local Importance					
-	-	-	-	-	-

Table 2. Ancient or Semi-Ancient Woodland

Name	Grid Ref.	Area (ha)	Distance from Site	Direction from site	Description
-	SP346269	0.49	940m	East	Ancient semi-natural woodland
Chalford Oaks	SP348270	0.65	990m	East	Ancient semi-natural woodland
Hide Wood	SP347283	4.77	1.4km	NE	Ancient semi-natural woodland
Harris Bottom	SP350269	0.14	1.3km	East	Ancient semi-natural woodland
Priory Wood	SP338280	2.12	810m	North	Ancient Semi-natural Woodland

Table 3. Species List

Species	European Protected	Nationally Protected	NERC/S 41	No. of Records	Suitable Habitat on-site
Amphibians					
Smooth Newt	No	Yes	No	2	No
Birds					
Barn Owl	No	Yes	No	882	No
Black Redstart	No	Yes	No	4	No
Brambling	No	Yes	No	24	No
Bullfinch	No	No	Yes	46	Yes
Corn Bunting	No	No	Yes	696	No
Corncrake	Yes	Yes	Yes	1	No
Crane	Yes	No	No	1	No
Crossbill	No	Yes	No	2	No
Cuckoo	No	No	Yes	51	No
Curlew	No	No	Yes	6	No
Dunnock	No	No	Yes	11	Yes
Fieldfare	No	Yes	No	353	No
Golden Plover	Yes	No	No	55	No
Grasshopper Warbler	No	No	Yes	9	No
Green Sandpiper	No	Yes	No	100	No
Grey Partridge	No	No	Yes	121	No
Hen Harrier	Yes	Yes	Yes	2	No
Heron Gull	No	No	Yes	6	No
Hobby	No	Yes	No	53	No
Hoopoe	No	Yes	No	10	No
House Sparrow	No	No	Yes	60	Yes
Lapwing	No	No	Yes	98	No
Lesser Redpoll	No	No	Yes	7	No
Lesser Spotted Woodpecker	No	No	Yes	1	No
Linnet	No	No	Yes	302	No
Little Egret	Yes	No	No	10	No
Marsh Tit	No	No	Yes	68	No
Merlin	Yes	Yes	No	25	No
Osprey	Yes	Yes	No	5	No
Peregrine	Yes	Yes	No	12	No
Quail	No	Yes	No	17	No
Red Kite	Yes	Yes	No	145	No
Redwing	No	Yes	No	115	No
Reed Bunting	No	No	Yes	202	No
Short-eared Owl	Yes	No	No	5	No
Song Thrush	No	No	Yes	72	Yes
Spotted Flycatcher	No	No	Yes	26	No
Starling	No	No	Yes	286	Yes
Tree Pipit	No	No	Yes	4	No
Tree Sparrow	No	No	Yes	492	Yes
Willow Tit	No	No	Yes	5	No
Wood Warbler	No	No	Yes	1	No
Yellow Wagtail	No	No	Yes	74	No
Yellowhammer	No	No	Yes	381	No
Fish - Bony					
Bullhead	Yes	No	No	1	No
Eel	No	No	Yes	1	No
Flowering Plants					
Bluebell	No	Yes	No	9	No
Invertebrates					
Small Heath	No	No	Yes	11	No

Species	European Protected	Nationally Protected	NERC/S41	No. of Records	Suitable Habitat on-site
Mammals (Bats)					
Bat	Yes	Yes	Yes	6	Yes
Brown Long-eared	Yes	Yes	Yes	44	Yes
Common Pipistrelle	Yes	Yes	No	18	Yes
Daubenton's	Yes	Yes	No	3	No
Lesser Noctule	Yes	Yes	No	2	No
Myotis Bat Species	Yes	Yes	Yes	4	Yes
Natterer's	Yes	Yes	No	5	Yes
Noctule	Yes	Yes	Yes	5	No
Pipistrelle Bat Species	Yes	Yes	Yes	3	Yes
Soprano Pipistrelle	Yes	Yes	Yes	8	Yes
Mammals					
Brown Hare	No	No	Yes	1	No
Eurasian Badger	No	Yes	No	22	No
Polecat	No	No	Yes	1	No

Field Survey

Habitats

5.6 The field survey was undertaken on 19th September 2023, a dry day with 100% cloud, a strong wind and an air temperature of 18° Centigrade. The results are summarised on the Phase I map (Figure 1) but the following habitats were identified during the survey:

- Buildings
- Hard-standing
- Amenity Grassland
- Hedge
- Trees and Shrubs

Buildings

The House

5.7 This is a two-storey detached stone-walled house with a multi-pitch slate roof that has a central chimney stack and one at the north-western gable end, both stone. Each end of the building has a hipped roof. On the south-western side there is a single storey, lean-to extension that has a central twin-pitch roof with a south-west gable end and open eaves (See Figure 3).

5.8 There is Ivy growing on the north-western and south-eastern ends of the main building. On the north-eastern side there is a uPVC conservatory at the ground-floor level, but with two stone dormers above this on the original building. There are wooden soffit boards on the north-eastern side of the main building and barge boards on the south-western side.

5.9 There were raised roof slates and gaps in the stonework of both chimneys, mortar was missing from many of the ridge tiles and there were gaps between the soffits/barge boards and the walls on all sides.

5.10 Inside the cottage the roof space is divided in two by the central stone chimney. Both have 200mm of fibreglass insulation laid on the ceiling. There is a mineral felt lining and a ridge board in each, with ridges following down each of the heaped roofs at either end of the building.

5.11 The ceilings rise 0.5m into the roof space, with the ridge 1.8m above the ceiling. The two roof spaces are L-shaped, with the foot being 3m wide and 6m long, while the main length is 2.5m wide and 7m long.

- 5.12 The south-eastern roof space contains a modern water tank nest to the chimney, with cobwebs along the apex of the roof, mouse and rat droppings on the ceiling, along with a desiccated mouse. Three bat droppings were found by the loft hatch of the south-eastern roof space.
- 5.13 In the north-western roof space there were cobwebs in the main length of the building, but some clear spaces within the cross-gable. A small concentration of 150 bat droppings was found beneath the ridge of the cross gable (See Figure 2), with a single Brown Long-eared bat roosting against the ridge board above this (See Figure 3). Only a single bat dropping was found in the main length of this roof space.
- 5.14 All the droppings were 8-12mm long, 2.5-3mm in diameter and course in texture.

Garden Structures

- 5.15 To the south of the house there is a 1.5m wide, 2m long and 2m high wooden ship-lap shed with a single skin twin-pitch felt roof. This has a chicken run to the south-east of it.

Hard Standing

- 5.16 A tarmac drive comes in from the main road, becoming scalping's as it moves towards the house, where there is a gravel drive next to the house.

Amenity Grassland

- 5.17 The amenity grassland is the largest habitat on the site, covering an area of approximately 800m². The grassland consists of frequent Red Fescue and Perennial Rye Grass, occasional Cocks Foot and White Clover, with Daisy and Ribwort Plantain occurring rarely. This is regularly cut.

Hedge

- 5.18 The main length of hedge runs along the south-eastern and south-western sides of the amenity grassland, which is dominated by Box. This is wide, but well maintained at 1.6m high. Along the off-site edge of the south-eastern section there is a 0.9m high dry-stone wall.
- 5.19 On the north-eastern side of the garden, next to the road, there is an out-grown Privet hedge, with some Hawthorn, Elder and Ivy within it.

Trees and Shrubs

- 5.20 Within the main lawn there is a single Apple tree and a small Cherry tree, with a Scots Pine next to the north-west corner of the house. None of these trees contain crevices, such as rot holes, Woodpecker holes or splits.

5.21 At the north-western end of the box hedge is a small group of immature Cherry trees, with some Privet shrubs and some Ivy growing on these.

Flora and Fauna

5.22 Woodpigeon were observed on the day of the survey.

6. Discussion

Sites

- 6.1 There is one site of national importance within 2km of the site. The small nature of the proposed development on already developed land means that this site will be unaffected by the proposed works.

Habitats

- 6.2 The habitats on the site are the result of human activity and are classified as semi-natural at best. These are mainly easily replaceable, being of low value for protected and notable species. The best habitat available on-site is the trees, shrubs and margins which offer nesting and foraging habitat for birds, and the main building for bats. This is discussed in greater detail in the species section below.
- 6.3 In the wider landscape the site is set in a rural area with the village of Chipping Norton 2km to the west. To the immediate north-east is an outgrown hedge with the A44 beyond. The area is surrounded mainly by agricultural fields with hedgerows and small woodland areas which will provide commuting foraging and roosting habitat for a variety of species which is discussed in greater detail below. However, there is a golf course to the south-west, with a hotel to the west and the hamlet of Southcombe to the north.

Species

Amphibians

- 6.4 The local records centre holds no records of Great Crested Newts (GCN), but 2 records of smooth newts within 1km of the site. There are no protected species licences issued for GCN within 1km of the site, there is one positive GCN survey licence return within 1km of the site, at a distance of 520m to the south-west, within trees on the golf course.
- 6.5 There are no ponds on-site, however there are two ponds within 500m of the site, 300m to the south-west and 450m south, both on the golf course. The managed amenity grassland on the site offers poor terrestrial habitat for GCN with limited refuge habitat. The proposals affect mainly the building and hard standing around it, so no GCN habitat is impacted, while there is a great distance from the development to the potential breeding ponds.
- 6.6 Assuming breeding GCN are present within the two ponds within 500m, when this information is placed into the Natural England Rapid Risk Assessment for GCN, a result of Green: Offence Highly Unlikely is obtained, as shown below.

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.005
Individual great crested newts	No effect	0
	Maximum:	0.005
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

6.7 This indicates that negligible GCN habitat will be affected, but assumes no individuals are harmed, so it is recommended that a precautionary GCN working method statement is followed in the unlikely event individuals are present on the site.

6.8 If this precautionary method statement is followed, GCN and other amphibians are not considered a constraint to the proposed development.

Bats

6.9 There are no sites designated for bats within 5km of the site, while the local records centre holds 98 records of at least six species of bats within 2km of the site, with the protected species licences covering another three species. This is likely to be a fair reflection of the number and variety of bat species in the area.

6.10 The immediate structure of the surrounding landscape provides moderate foraging, commuting and roosting habitat for bats, with the buildings within the hamlet of Southcombe and the town of Chipping Norton offering good potential roosting opportunities.

6.11 A few scattered bat droppings were found in both roof spaces, with a concentration of 150 in the north-western roof space, indicating a roosting point above. The droppings were 8-12mm long, 2.5-3.0mm in diameter and coarse in texture, being indicative of Brown Long-eared bats (Entwistle and Swift, 2008). This was confirmed by the presence of a Brown Long-eared bat roosting next to the ridge board above the concentration of droppings. The low number of droppings indicate that this is used by a single bat and a maternity colony is not present.

6.12 Raised roof slates were observed around both chimney stacks and gaps between the wooden fascia and walls on all sides, with further gaps in the un-mortared ridge tiles. These are features where crevice dwelling bats such as Common Pipistrelle could roost without evidence being found (Jones and Racy 2008 &).

6.13 Therefore, the house was assessed as having a minor Brown Long-eared roost and the potential for minor roosts of crevice dwelling bats, such as Common Pipistrelle. As the house is to be demolished, the work will be carried out under a Bat Mitigation

Class licence for up to three minor roosts, with mitigation being the provision of a dedicated bat roost within the roof of the new build, or a double garage there-of. This will have mineral felt lining, a ridge board and be at least 1.8m high (to reflect the current apex height) 5m long and 4m wide.

- 6.14 The small wooden shed and on-site trees lack features suitable for roosting bats, so have been classified as having negligible potential for roosting bats.
- 6.15 As bats are present in the building, the ‘three tests’ required for a European Protected Licence must be satisfied. These are;
- That the work is for imperative reasons of overriding public interest
 - There is no satisfactory alternative
 - There is no detrimental effect to the population of bats at a favourable conservation status within their natural range.
- 6.16 In this case the first is covered by the planning permission when it is granted, so that the building can be replaced as a functioning property, enhancing the local housing stock in-line with local and national planning policies.
- 6.17 For the second test, the building is in a poor state of repair, so the do-nothing option is not feasible as the building is currently not fit for purpose (poor design for disabilities) and is likely to soon become uninhabitable, which goes against local planning policy to maintain the local housing stock. To site the new build elsewhere would require the use of greenspaces in a rural area, which also goes against local and national planning policies
- 6.18 The final test is to maintain the conservation status of bats in the area. As bats are roosting in the building a full mitigation package will be designed to ensure this, with a combination of bat tiles, bat boxes and a bat loft as mitigation and enhancements, while the use of a working method statement outlined in the next section of this report will allow bats to continue to roost in the replacement building to maintain the conservation status of bats on the site and in the area.
- 6.19 In addition, the temporary bat boxes used in the working method statement and the ecological supervision will prevent detrimental effects occurring to individuals or the local population in the short-term, whilst retention of the bat boxes after the works have been completed will enhance the roosting potential in the area.
- 6.20 The grounds are relatively dark currently, so it is recommended that lighting here is minimal, as follows;
- There will be no direct lighting of the roof of the buildings.
 - Any outdoor lighting will be less than 3 lux light level.

- LED luminaries with warm white spectrum <2700 Kelvin (To Avoid Blue / UV Elements) are to be used.
- Bollard or low-level downward directional luminaries are used and mounted on the horizontal with no upward tilt.

6.21 Any security lighting will not exceed 75w in power, the light will be motion activated with short timers (1 Minute), angled downwards as sharply as possible to light up the immediate area only and reduce light-spill.

Badger

6.22 The local records centre holds 22 records of Badgers within 1km of the site. The Preliminary Ecological Assessment Survey found no evidence of Badgers on the site. Therefore, Badgers are considered absent and are not a constraint to the proposed re-development.

Birds

6.23 The local records centre holds 7,346 records of protected and notable bird species within 1km of the site. The vast majority of these were from a single site where there appear to be regular surveys. On-site habitat is limited to the hedge, shrubs and immature trees and the building, although no nests were identified during the survey, which provides nesting habitat for mainly commonly occurring birds, but this also includes some Section 41 species, such as House Sparrow and Dunnock.

6.24 All nesting birds are protected by law. Therefore, any tree or shrub removal or surgery work will avoid the bird nesting season of March to September, or if this is not possible, an ecologist will check the vegetation to be removed for nesting birds. If a nest is found it and 5m of habitat around it will be left undisturbed until the young have fledged before removal.

6.25 Recommendation have been put forward in the next section to enable birds to continue to use the site.

Hazel Dormouse

6.26 There are no records of Dormouse within 1km of the site. The dormouse's preferred habitat is blocks of woodland, scrub habitat and old mixed hedgerows. This habitat is not present on-site and is not directly connected to any of the off-site habitat by hedges. Therefore, Dormice are considered likely absent and are not considered to be a constraint to the proposed re-development.

Invertebrates

6.27 The local records centre holds 12 records of notable invertebrates within 1km of the site, 11 of Small Heath and one of Black Slug.

6.28 The habitats on-site are likely to favour the more common species of invertebrates. Invertebrates are not considered a constraint to the proposed re-development, but recommendations have been put forward to enhance the site for invertebrates.

Otter

6.29 There is no habitat for Otter on the site and are believed to be absent. Therefore, Otters are not considered a constraint to the development.

Reptiles

6.30 The local records centre hold no records of reptiles within 1km of the site.

6.31 The main habitat on-site is well managed amenity grassland, this habitat is unsuitable for reptiles, which are considered absent from the site and not therefore a constraint to the proposed development.

Water Vole

6.32 There are no water bodies on the site, therefore Water Voles are believed to be absent from the site and are not considered a constraint to the proposed works.

White-clawed Crayfish

6.33 There are no water bodies on the site, therefore White-clawed Crayfish are believed to be absent from the site and are not considered a constraint to the proposed works.

7. Further Surveys, Recommendations and Enhancements

Further Surveys

- 7.1 A set of three bat emergence surveys are required to confirm the classification of the roost within the building and determine if other species are roosting there. These will be carried out during the active season for bats from May to September, with two of the three surveys carried out between mid-May and August. These will be spaced out at least three weeks between each survey. Three surveyors will be required to cover all aspects of the building.

Recommendations

Breeding Bird Working Method Statement

- 7.2 Any building, scrub or tree works/removal will be carried out outside the bird nesting period, which is March to September. If this is not possible an ecologist will check the habitat to be removed for active birds' nests no more than 24 hrs prior to the work commencing. If nests are found they will be left in place, a buffer zone (e.g., 5m) will be placed around the nest location using brightly coloured tape. The ecologist will estimate the time until the chicks have fledged and will return to check the nest on completion of the set time, with the tape remaining in place until the ecologist is content that all young have fledged.
- 7.3 If a nest is discovered during the building demolition/site clearance then all work must cease. The site manager and ecologist will then be contacted. The ecologist will check the nest to confirm if it is active. If confirmed active then the works will only continue on the setting up of a buffer zone using tape and will be left in place until the ecologist confirms that all young have fledged and left the nest.

Working Method Statement for Bats

- 7.4 The demolition will be carried out under a protected species licence, currently expected to be a site registration under a bat mitigation class licence, as the building is expected to contain no more than three minor roosts of commonly occurring species of bats, with one confirmed currently.
- 7.5 Two bat boxes will be erected in suitable trees within the grounds of the site prior to any licenced works being carried out. These bat boxes will be retained on-site after the works have been completed as an enhancement to the site. There will be one Schwegler 1FF and one Schwegler 2FN or equivalent.
- 7.6 A tool-box talk will be carried out by a qualified ecologist to inform the contractors of the method statement, the protection afforded bats, how to recognise bats and what course of action they will need to follow if a bat is found during the work.

- 7.7 Before demolition works commence the Ecologist licenced to disturb bats will inspect the internal roof spaces of the building as a final check for roosting bats, removing any found by hand and placing them in the bat boxes.
- 7.8 The ecologist licenced to disturb bats will oversee the initial removal of tiles and bat features, such as ridge tiles and soffits. All tiles will be lifted from the roofs, not slid off, to avoid injury to bats if they are present beneath.
- 7.9 If, in the unlikely event that a bat is encountered, it will be taken by hand by the ecologist, who is very experienced in handling bats. The bat will be stored in a cotton bag to keep it calm and secure and moved to the newly erected bat box.

Bat Mitigation

- 7.10 A dedicated roof space will be created as a mitigation bat roost. This will be at least 1.8m high, 4m wide and 5m long, to recreate the current area used by roosting brown long-eared bats.
- 7.11 Two bat slates will be fitted into the roof, one on either side, but not opposite each other, to prevent through-drafts. Slots will be cut into the lining beneath of the bat slates to allow Brown Long-eared bats to access the internal roof space. An additional bat slate will be put in the roof, but with no gaps in the membrane, to create a roost for crevice dwelling bats.
- 7.12 The roof will have a traditional ridge board and will be of a cut construction, as it is currently, and trusses will not be used, as this will congest the internal flying spaces. The ridge tiles will be mortared in at the joints only, leaving gaps beneath the main body of the tile, which is a favoured roosting point for many bat species.
- 7.13 The roof lining will be mineral felt lining, or a breathable liner that has passed a 'snagging propensity test', such as BatSafe, not a standard breathable membrane. This will prevent the bats 'fluffing' standard breathable membranes, that then entangle and kill them in the threads produced (Waring, 2013).
- 7.14 There will be a hatch into each of the loft, but this will only be 500mm by 500mm in size to discourage storage there, but will allow access for a licenced bat worker to inspect the roost

Lighting

- 7.15 There will be no direct lighting of the trees and shrubs on the site. Should bat roosts be identified through the emergence survey then there should be no direct lighting of the new roost entrances on the new builds or on any bat boxes placed on surrounding trees. Any outdoor lighting should be;

- Less than 3 lux light level

- Led luminaries with warm white spectrum <2700 Kelvin (To Avoid Blue / UV Elements)
- Bollard or low-level downward directional luminaries are used and mounted on the horizontal with no upward tilt.
- Any security lighting should not exceed 75w in power, the light should be motion activated with short timers (1 Minute), angled downwards as sharp as possible to light up the immediate area only.

Precautionary Method Statement for GCN

- 7.16 The contractors will be given a tool-box talk before works commence. This will describe the legal protection for GCNs, what they look like, what action should be taken if any are found and have the method statement explained to them clearly.
- 7.17 Shrub clearance prior to works will be carried out in winter, or as shown in the method statement for nesting birds, as detailed below. If clearance is made during winter, shrubs will be cut no lower than 150mm above the ground to leave the root system undisturbed, as this is potentially where GCN can hibernate. The roots will be removed under ecological supervision when amphibians are active, between March and October inclusive.
- 7.18 Ground-works will only take place in daylight hours when Great Crested Newts will not be moving around, as GCNs are nocturnal and will be started during the GCN active period of March to October, to avoid the hibernation period.
- 7.19 Materials will be stored on pallets or tarpaulin sheeting to prevent the creation of habitat suitable for GCNs to shelter in within 250m of Water Body 1.
- 7.20 All construction vehicles will access the site via the existing road system and remain on the hard standing and working footprint.
- 7.21 Excavations will be filled in as soon as possible after they are made, but any trenches, if left open, will always have a ramp placed in them to allow GCNs and other wildlife to climb out of the trench if they fall into it.
- 7.22 Any excavated holes will be checked for GCNs if left open overnight. Any GCNs found will be moved to the nearest suitable habitat.

Enhancements

- 7.23 Any planting of shrubs in the grounds will include flower bearing species, particularly night-flowering ones, to encourage insects that provide food for bats. Shrubs and plants such as Honeysuckle, Aubretia, Alyssum, Hazel, Hawthorn, Heather, Evening Primrose, Crab Apple, Ornamental Cherry, Hebes and Flowering Currant can be used (See www.rhs.org.uk/advice/pdfs/plants-for-bats.pdf).

- 7.24 Four bird boxes of a variety of designs could be erected in retained trees or on the new building to enhance the site for nesting birds.
- 7.25 Four invertebrate boxes or a log-pile could be placed within the grounds to enhance the site for invertebrates.
- 7.26 The temporary bat boxes will be retained as an enhancement for the site.

8. Figures

Figure 1: Site Plan

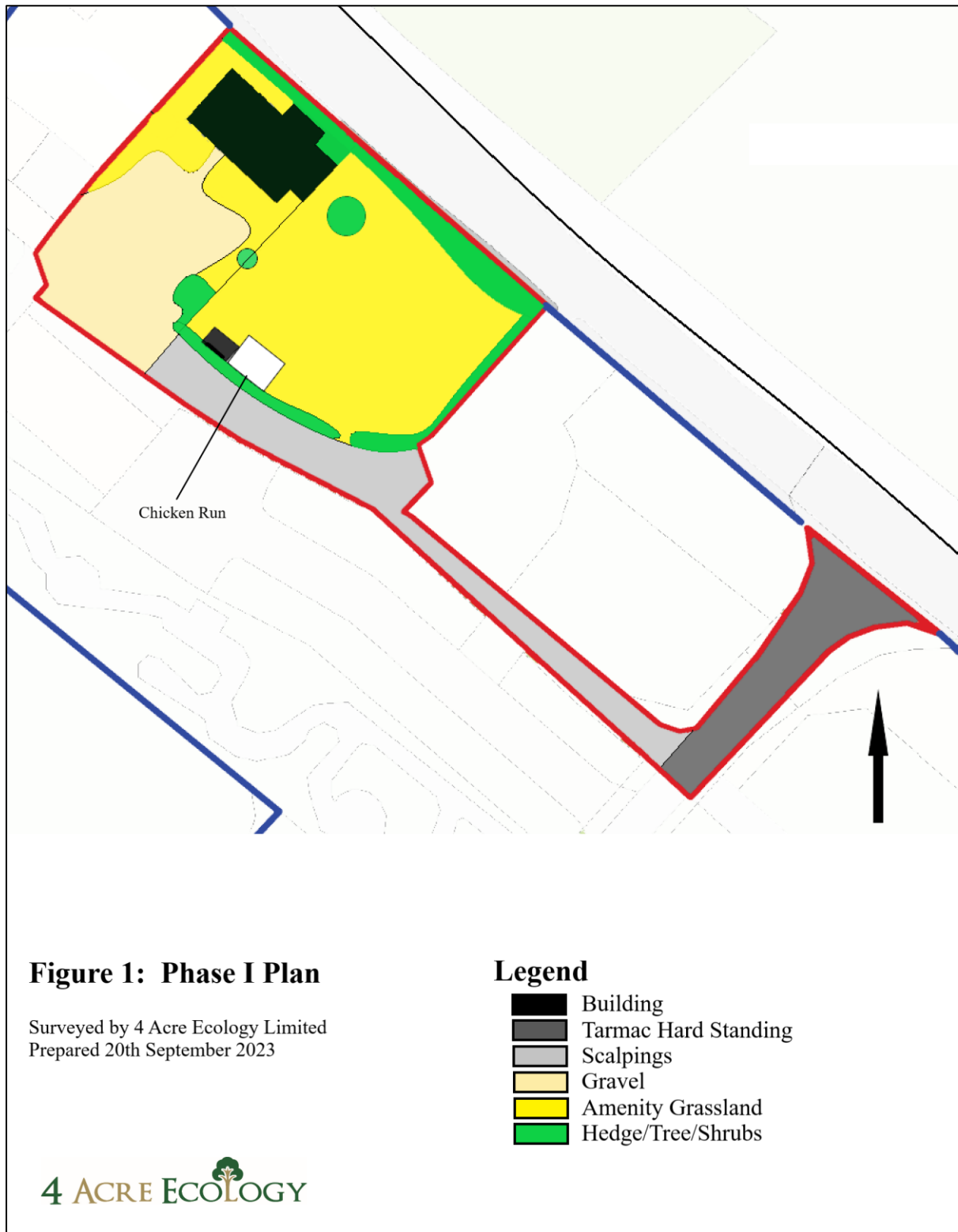


Figure 2: Building Plan

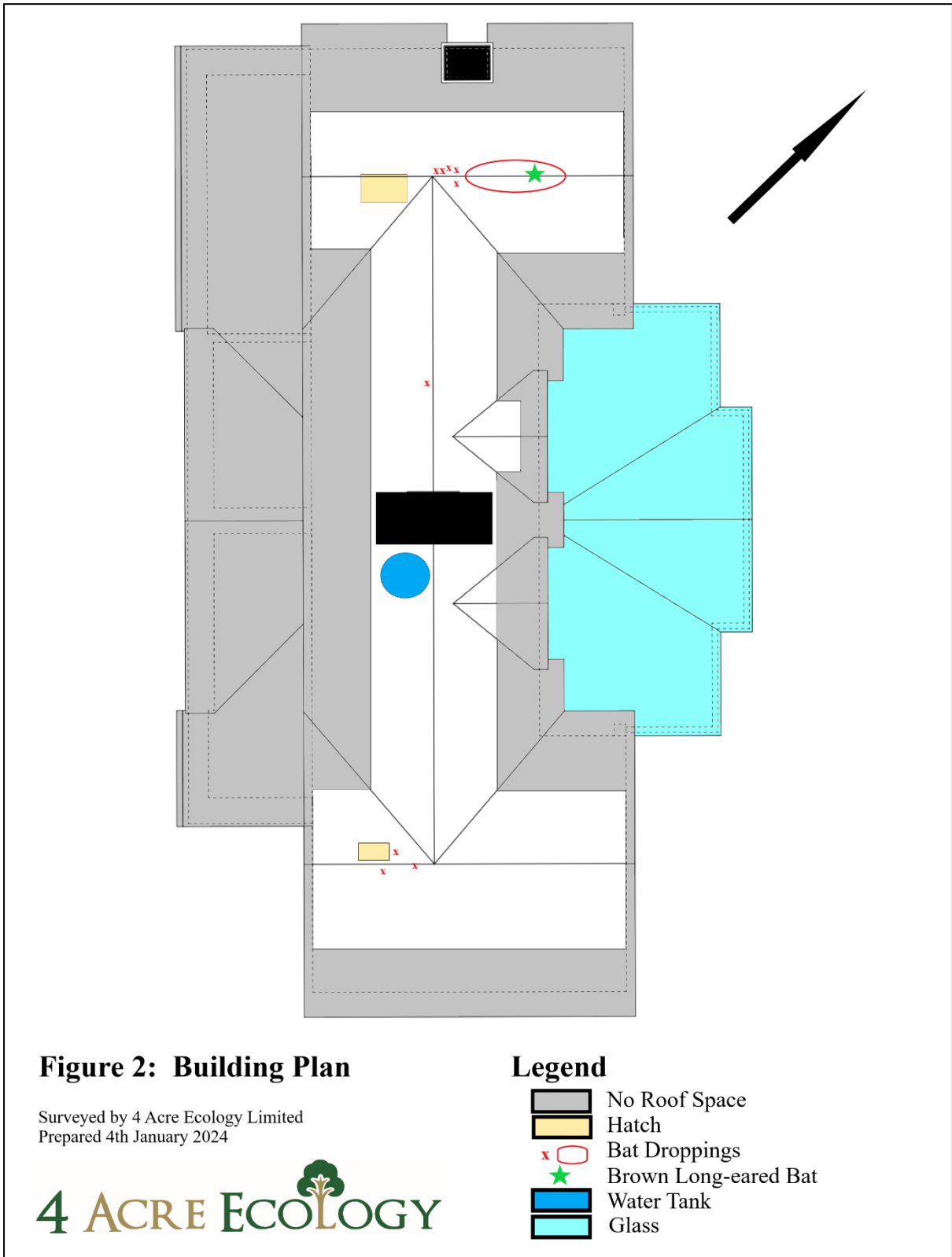


Figure 3: Images



1. The house from the west



2. The house from the south



3. House from the north-east



4. Gaps under ridge tile



5. Main garden to south of building



6. Main garden and chicken run



7. Roof space



8. Brown Long-eared bat roosting in NW roof space

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Appendix 1: Information on British Bats

There are 18 species of bat in the UK (17 of which are known to be breeding here). They range from the tiny **Pipistrelle**, weighing in at around 5g (less than a £1 coin), to our biggest bat, the **Noctule**, which is still smaller than the palm of your hand.

All British bats eat insects exclusively, a **Pipistrelle** bat eating as many as 3,000 midges in one night, while **Long-eared** bats eat moths and **Noctule** or **Greater Horseshoes** also eat larger beetles.

The **Alcothoe** bat is the latest addition to the UK bat family, only being confirmed as a resident species in 2010 due to its similarity to the **Whiskered** and **Brandt's** bat species.

The **Daubenton's** bat is known as the 'water bat', as they fish insects from the water's surface with their large feet or tail. In England and Wales the majority of known summer colonies are in humid, more or less underground sites near water. These may be tunnels or bridges over canals and rivers, or in caves, mines and cellars. They are only occasionally found in buildings, usually old stone structures such as moated castles and waterworks.

Bats do not build nests, but use small spaces to shelter and rest in during the day, or hibernate in during winter. These places are known as roosts. There are a variety of different types of roost, from winter hibernation roosts, spring and Autumn transitory roosts to summer maternity roosts. However, not all bats will roost within buildings, with the following being those most likely to:

Pipistrelle bats (both Common and Soprano species) are the most common bats in this country. They prefer to roost in very confined spaces around the outside of buildings, typically behind hanging tiles, soffits and barge boards, under roofing felt or in cavity walls. They do not usually enter roof spaces, although well-established large colonies in older buildings may do so.

Brown Long-eared bats are the third most commonly occurring species, after the two **Pipistrelle** species. They roost singly or in small groups among the roof timbers at the apex, particularly around ridge ends and chimneys, and in crevices in ridge tiles. These medium sized bats spend more time inside the roof space than many other bats, and are generally very quiet inside the roost, not leaving until after dark.

The **Serotine** bat, one of the largest bat species in the UK, is almost exclusively found roosting in houses across southern England and Wales. Rarer than **Pipistrelles** and **Brown Long-eared** bats, **Serotines** usually roost in crevices around chimneys and in cavity walls. Their favoured prey is large beetles, which they find over farmland and grassland.

Horseshoe bats, probably the most unusual looking of the UK's bats, are sometimes found roosting in houses in south-western England and Wales. **Greater** and **Lesser Horseshoe** bats hang free in the roost from their feet.

(Find further details from the Bat Conservation Trust Website at: www.bats.org.uk)