Bat Survey Report: Presence / Absence Survey

Elmridge Farmhouse

Elmridge Lane, Chipping, Preston

July 2017

Prepared for: Taylor Country Homes Ltd

Report prepared by: Verity Webster BSc (Hons) MSc CEcol CMIEEM

EXECUTIVE SUMMARY

- On 15th June 2017 a Preliminary Roost Assessment was undertaken at Elmridge Farmhouse, Chipping, Preston.
- The farmhouse is considered to have moderate suitability for bats.
- No evidence of a significant roost, such as a maternity roost was discovered on site. Evidence of this, if present, is expected to have been visible as it was possible to access all areas of the property and the roof is unlined.
- However, the property has potential to support smaller numbers of crevice-roosting bats.
- In order to determine the presence or absence of bat roosts, bat emergence surveys were recommended.
- Two evening emergence survey were undertaken on 16th May 2017 and 15th June 2017 in accordance with the current survey good practice guidance.
- No bats were seen or heard emerging from the building.
- The survey work is considered sufficient to give confidence in the absence of roosts that are regularly used, but given the numerous features associated with the building, the possibility of the building being utilised from time to time by small numbers of itinerant bats cannot be entirely ruled out.
- For this reason, precautionary methods of work are proposed during removal of the roof structure of the farmhouse.
- Enhancement of the site for bats is recommended through the installation of bat boxes.

1 Introduction

1.1 Application Site

1.1.1. This report details bat presence / absence survey work at Elmridge Farm House, Elmridge Lane, Chipping, Preston, Lancashire, PR3 2WU. National grid reference: SD 595 405.

1.1.2. Taylor Country Homes Ltd commissioned Verity Webster Ecology and Protected Species Consultancy to undertake the bat survey work to inform the planning application.

1.2 Objectives

1.2.1 The objectives of the Preliminary Roost Assessment and Emergence Surveys are to determine:

- Whether bats are currently using the building to roost and if so, how.
- The species and number of bats present.
- The status of any roost present.
- How bats might be using the rest of the site (garden).
- The potential impacts of the proposals on any roost present or on bats using the site.
- How any impacts might be avoided, mitigated and / or ameliorated, including advice on European Protected Species Mitigation (EPSM) application if required.

1.3 Proposals

1.0.1 The proposals for the site comprise the demolition of the existing structure and the construction of a new dwelling.

1.4 Ecologist

1.4.1 The Bat Emergence Survey work was lead and undertaken by Verity Webster. Verity is a licensed bat surveyor (Bat Survey Class Licence WML CL18 (Class 2) Registration number: CLS02606).

1.4.2 Verity has worked as an ecological consultant for over 10 years. She has undertaken preliminary bat assessments and further bat emergence / activity surveys for a large variety of projects and schemes, producing the required impact assessment and subsequent mitigation schemes / method statements when necessary.

2 The Survey Site

2.1 Site Location

2.1.1 Elmridge Farmhouse is located in Chipping, Preston, in a rural location approximately 2.7km north of Longridge.

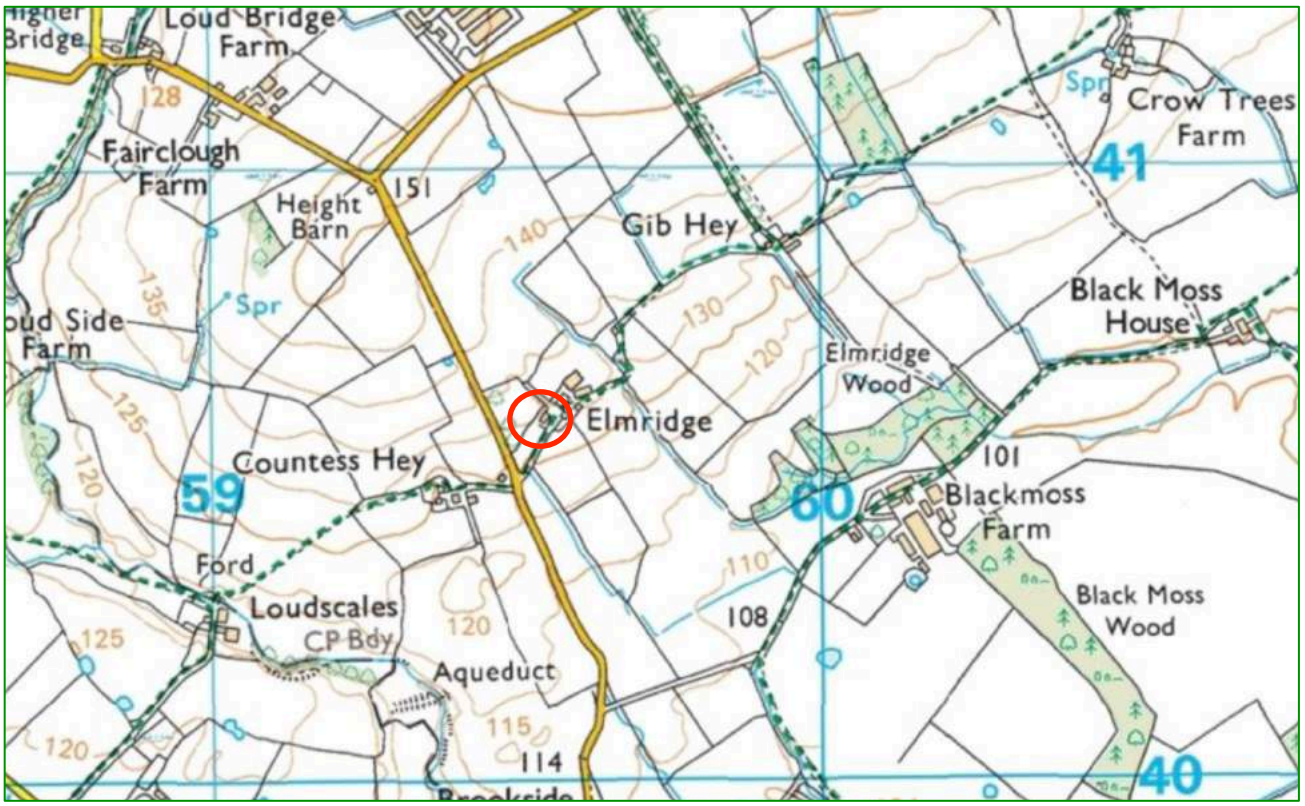
2.1.2 The Farmhouse is part of a farm complex, the remainder of which has been subject to previous planning applications.

2.1.3 The site is surrounded by open countryside comprising mainly arable and pasture-land divided by a matrix of treelines and hedgerows.

2.1.4 There are scattered waterbodies throughout the wider landscape. Woodland is infrequent, however and where present is represent by small, managed copses.

2.1.5 The River Loud weaves north to south through the landscape approximately 450m to the southwest at the closest point.

Figure 1: Ordnance survey map showing surrounding landscape in relation to the survey site



Ordnance Survey Map 1:25000

Key ○ Survey site

Figure 2: Aerial map showing surrounding landscape in relation to the survey site

From Bing Maps 2016

250m

Key Survey site

2.1 The Farmhouse

6.1.1 The farmhouse is a two-storey stone and brick structure with a pitched slate roof. The building is rectangular and oriented northeast to southwest. On the northeast elevation there is a hay-barn with a first-floor access.

6.1.2 The main body of the farmhouse contains a loft-space, which was also accessible at the time of survey. The loft space is approximately 2m to the apex.

6.1.3 The majority of the building is rendered, although this is falling always on part of the southeast elevation.

The southeast elevation of the farmhouse

6.1.4 There is a wooden fascia along the southeast and northwest elevation, but none on the gable ends.

6.1.5 There is a porch in the middle of the southeast elevation, also with a pitched, slate roof.

6.1.6 The roof is unlined and much of the mortar on the underside of the slates has fallen away.

The northwest elevation of the farmhouse

Roost potential – Features

6.1.7 Internally, the building has features with suitability for bats, but no evidence of use by bats.

6.1.8 The hayloft provides a large, open void with potential for foraging bats. The space is open to the eaves. As is true for the entire building, the roof is unlined and nearly all of the mortar lining the slates has fallen away. There are numerous crevices and gaps that may allow access for bats. The window present does allow entry of much natural light however, which will deter free-hanging bat species, such as brown long-eared bat (*Plecotus auritus*).

6.1.9 No signs of the presence of bats (droppings or feeding remains) were found in the hayloft. The space is considered unsuitable for void-dwelling bats, such as brown long-eared bats in which to roost, but the numerous crevices under the slates, between the slates and the remaining mortar and between slates and the joists may provide opportunities for crevice-roosting bats such as pipistrelle species.

6.1.10 The loft void within the main body of the building is similar; there is potential for bats such as brown long-eared bat to roost, but no evidence of this. The masses of cobwebs along the ridge beam and throughout the space further support this finding, as this would be clear were bats flying through the space with any regularity.

6.1.11 The numerous crevices under the slates and between beams do provide opportunities for crevice-dwelling bats to roost. Nevertheless, if a significant roost, such as a maternity roost were present, droppings would be expected in the interior of the building where they have fallen through from the roof.

6.1.12 Externally, the suitability for bats lies with the roof, as explained above. The mortar is missing from the gable ends of the building and slipped and missing slates provide opportunities for bats to enter the structure.

6.1.13 There are also some crevices in the walls of the building, but these are few and no evidence of bats (droppings) was found during inspection.

The hayloft

The loft void

3 Legislation

Full details of relevant legislation and planning policy can be found in Appendix A.

3.1 UK and EU Legislation

3.1.1 Key legislation regarding the protection of bats:

- Wildlife and Countryside Act 1981 (as amended)
- The Countryside and Rights of Way Act (CROW), 2000
- The Natural Environment and Rural Communities Act (NERC, 2006)
- Conservation of Habitats and Species Regulations (2010)

3.1.2 Under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2010,it is a criminal offence to:

- Deliberately capture, injure or kill a bat
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time)
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat
- Intentionally or recklessly obstruct access to a bat roost.

3.2 Planning Policy and Legislation

3.2.1 Under the NERC Act 2006, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site before they make a decision on the planning permission.

3.2.2 The National Planning Policy Framework (NPPF) encourages Local Planning Authorities to conserve and enhance biodiversity.

3.2.3 Chapter 11, Para 109 of NPPF states: ''*The planning system should contribute to and enhance the natural and local environment by…minimising impacts on biodiversity and providing net gains in biodiversity where possible…*''

3.2.4 Paragraph 118 states: ''*if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused*''

3.2.5 The local planning authority has a responsibility, therefore, to obtain all information regarding the potential for protected species on a site prior to making a decision about a proposal.

3.3 Local Policy

3.3.1 Trafford Council adopted their Core Strategy in January 2012.

3.3.2 Core policy R2 Natural Environment is to ensure the protection and enhancement of the natural environment in the borough and states that where necessary, in order to protect the natural environment, developers will be required to provide an appropriate ecological assessment report to enable the Council to properly assess and determine the merits or otherwise of the development proposal. All planning applications submitted for development within, or within close proximity to, any of the Borough's assets, must be supported by such a report. The Borough's Assets include European Protected Species, such as bats.

4 Survey Methodology

4.0.1 The Bat Surveys were undertaken in accordance with current accepted guidance: Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edn). The Bat Conservation Trust, London.

4.1 Bat Emergence Surveys and Assessment of Activity

4.1.1 Following the Preliminary Roost Assessment on 15th June 2017 the Farmhouse was considered to have moderate suitability for bats. Refer to the report Bat Survey: Preliminary Roost Assessment, June 2017. Verity Webster Ltd.

4.1.2 Two evening emergence surveys were considered sufficient to give confidence in a negative result (absence of a roost).

4.1.3 Table 7.1 of Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edn). The Bat Conservation Trust, London:

Table 7.3 Recommended minimum number of survey visits for presence/absence survey to give confidence in a negative result for structures.

Low roost suitability	Moderate roost suitability	High roost suitability
One survey visit. One dusk emergence or dawn re-entry survey.	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey.	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn.

4.1.4 Two evening emergence survey was undertaken. The bat emergence surveys were undertaken from 15minutes before sunset to 1.5 hours after sunset.

4.1.5 During the evening emergence survey three surveyors were positioned around the building such that the elevations were easily observed. The skyline was such that it was clear to see bats against the sky if they were to emerge.

4.1.6 Batbox Duet detectors and Echo Meter Touch detectors were used so that any calls heard that could not be identified were recorded for later analysis.

4.1.7 The time, activity (emergence, foraging, commuting) and species of bats (where possible) were recorded when observed. Notes were made of the activity of bats elsewhere on site as well as around the building. The number of bat passes were recorded to provide an indication of bat activity level within the site.

5 Survey Limitations

5.0.1 The survey work was undertaken in July. This is the optimal time to undertake survey work within the bat survey period. At this time of year bats would be expected within their summer roosts. Given the nature of the potential roost features upon the building pipistrelle bat species were most likely to be expected, if a roost were present. The surveys undertaken and data obtained are considered sufficient to make an adequate, reliable assessment of the likely presence / absence of a bat roost

within the structure.

5.0.2 Records data from the local records centre was not obtained in order to inform this assessment. In this case, it is considered unnecessary to obtain the data, as the inspection and survey work is adequate to inform any necessary mitigation recommendations.

6 Findings: Presence / Absence Surveys and Activity Assessment

8.1 Survey 1: Evening Emergence on 10th July 2017

Surveyors: Verity Webster Bsc MSc CEcol MCIEEM (bat licence Class 2) and Scott Tetlow (three years bat survey experience) and Gail Marsh (one years bat survey experience).
Weather: 14°c at sunset - 12 °c at 22:30. 30% cloud cover, dry, humidity 70%, light breeze (wind 6mph northwest).
Sunset: 21:39
Time on site: 21:15 – 23:10

Findings

8.1.1 Two species of bat were recorded on site: common pipistrelle (*Pipistrellus pipistrellus*) and a *Myotis* species.

8.1.2 No bats were confirmed emerging from the building.

8.1.3 Bat activity within site during the survey was moderate. Bats were recorded passing through the site along the driveway, which acts as a commuting corridor, and were recorded foraging on site around and between the farm buildings.

8.1.4 The first bat, a common pipistrelle was recorded at 22:00, 21 minutes after sunset. This suggests that the bat emerged from a roost within relatively close proximity to the survey site.

8.1.5 Occasional foraging by common pipistrelles was recorded around the driveway. There was continual foraging between 22:07-22:15 by a single common pipistrelle to the southeast of the building around the mature trees.

8.1.6 A single pass by a *Myotis* species was recorded at 22:23 at the southwest of the farmhouse. The bat was commuting.

8.2 Survey 2: Evening Emergence on 20th July 2017

Surveyors: Verity Webster Bsc MSc CEcol MCIEEM (bat licence Class 2), Scott Tetlow (three years bat survey experience) and Ross Tetlow (three years bat survey experience)
Weather: 12°c at sunset. 0% cloud cover (clear), dry, humidity 85%, moderate breeze (wind 8mph southwest).
Sunset: 21:28
Time on site: 21:10 – 23:00

Findings

8.2.1 Two species of bat were recorded during the survey: common pipistrelle (*Pipistrellus pipistrellus*) and noctule (*Nyctalus notctula*).

8.2.2 No bats were seen emerging from the building.

8.2.3 Bat activity within site during the survey was moderate as common pipistrelle bats in the area were foraging in the driveway and around the trees.

8.2.4 The first bat was recorded was a common pipistrelle at 21:55, 27 minutes after sunset. This suggests the bat had emerged from a location relatively close to the site, but it did not emerge from the building.

8.2.5 A single noctule was recorded passing over the site at 22:26. Noctules typically emerge early in the evening, often before sunset, so the late recording indicates that the bat was commuting over the site to foraging grounds and was not roosting within close proximity.

Figure 3: The positions of surveyors during emergence and re-entry surveys

KEY

A Surveyor Positions

The Farmhouse

9 Appraisal and Impact Assessment

9.1 Appraisal

9.1.1 Three species of bat were recorded during the surveys: common pipistrelle, noctule and a *Myotis* species.

9.1.2 Common pipistrelle bats were the most abundant on site and were recorded foraging around the buildings near the trees and commuting along the driveway.

9.1.3 No bats were confirmed emerging from the building and no bat evidence of bat activity (droppings, feeding remains) was found within the building or on external features.

9.1.4 The survey work is considered sufficient to give confidence in a negative result (likely absence of a roost within the building).

9.1.5 However, due to the numerous features associated with the building that provide suitability for crevice-roosting bats such as pipistrelles, and given the activity of this species group in the area, the possibility of the building being utilised from time to time by small numbers of itinerant bats cannot be entirely ruled out.

9.2 Assessment of Impacts

9.2.1 The survey work indicates the likely absence of a bat roost within the farmhouse.

9.2.2 The proposals to demolish the building are therefore unlikely to have a significant negative impact upon bats in the locality.

9.2.3 However, due to the numerous features associated with the building that provide suitability for crevice-roosting bats such as pipistrelles, and given the activity of this species group in the area, the possibility of the building being utilised from time to time by small numbers of itinerant bats cannot be entirely ruled out.

9.2.4 For this reason, although the risk of bats is low, precautionary methods of work are proposed during removal of the roof structure of the farmhouse to minimise the risk of harm to any individual itinerant bats.

10 Recommendations

10.0.1 The survey work undertaken indicates the absence of a bat roost within the building and it is considered therefore that the proposals to demolish the building are unlikely to have a negative impact upon individual bats or bat populations in the locality.

10.0.2 However, as there is a risk that individual bats may, upon occasion, roost within the features associated with the roof structure, it is recommended that:

- *Works to remove the slates and timbers are undertaken with care, by hand.*
- *During such works, slates and timbers must be checked for the presence of bats and for signs of bats (droppings).*

- *If bats or signs of bats are found during works, works must stop and an ecologist contacted for advice.*

10.0.3 Given that the bat activity on site was moderate, and there is likely a roost present within close proximity to the site, it is recommended that enhancement is undertaken following works to allow provision of bat roost sites for crevice roosting bats (such as common pipistrelles) in the area.

10.0.4 It is recommended that:

- *3 bat roost boxes are installed on trees or buildings within the site.*
- *The Kent Bat Box, as shown in Appendix B, is simple to construct by hand and does not require any maintenance. This box is ideal for pipistrelle bats in which to roost in the summer months.*

11 References

- Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1
- Google maps (Accessed 2015) https://www.google.co.uk/maps
- MAGIC Map (Accessed 2015) http://www.magic.gov.uk/MagicMap.aspx. DEFRA.

APPENDIX A: Wildlife Legislation and Planning Policy

UK AND EU LEGISLATION

1.1. KEY LEGISLATION

1.1.1. Key legislation regarding the protection of bats:

- Wildlife and Countryside Act 1981 (as amended)
- The Countryside and Rights of Way Act (CROW), 2000
- The Natural Environment and Rural Communities Act (NERC, 2006)
- Conservation of Habitats and Species Regulations (2010)

1.2. WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED)

1.2.1. The Wildlife and Countryside Act 1981 is UK legislation.

1.2.2. Bats are listed on Schedule 5 of the Wildlife and Countryside Act (WCA) 1981. Under Section 9 of this legislation it is an offence to:

- Kill, injure or take a bat.
- Possess, a live or dead bat.
- Intentionally or recklessly damage or destroy any structure of place which any bat uses as shelter or protection.
- Intentionally or recklessly disturb a bat whilst it is occupying a structure or place which it uses for shelter or protection.
- Internationally or recklessly obstruct access to any structure or place which a bat uses as shelter or protection.
- Sell, offer or expose for sale any live or dead bat.

1.3. COUNTRYSIDE AND RIGHTS OF WAY ACT 2000

1.3.1. Schedule 12 of the Countryside and Rights of Way (CROW) Act 2000, amended by the Wildlife and Countryside Act 1981 by removing the need to prove intent to damage a roost / harm (etc) a bat or other species listed on Schedule 1 by adding the words 'or recklessly' after 'intentionally' into the wording in Section 9 of the WCA 1981. The CROW act also strengthened the penalties for offences to bats and other species listed on Schedule 5.

1.4. CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2010

1.4.1. The Conservation of Habitats and Species Regulations 2010 consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales.

1.4.2. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law. The regulations came into force on 30 October 1994.

1.4.3. The Regulations provide for the designation and protection of European Sites and European Protected Species, including bats.

1.4.4. Under the Regulations, competent authorities (ie any government department or public body) have a general duty, in the exercise of any of their functions, to have regard to the EC Habitats Directive.

1.4.5. With regard to European Protected Species (including bats), the Regulations make it an office to:

- Deliberately capture;
- Kill;
- Disturb or;
- Trade in animals listed in Schedule 2, which include all UK bat species.

1.5. European Protected Species (EPS) Licenses and the Three Tests

1.5.1. These actions can me made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserve public health and safety). For such a licence to be granted the appropriate authority would have to be satisfied that an application has met the three tests, which are:

1)- The licence may be granted ''to preserve public health or public safety or for reasons of overriding public interest, including those of a social or economic nature and beneficial consequences or primary importance for the environment''

2)- There must be ''no satisfactory alternative''

3)- The proposal ''will not be detrimental to the maintenance of the species at a favourable conservation status in its natural range''

1.6. NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006 (PLANNING SYSTEM)

Planning Authorities: A Duty to Conserve Biodiversity

1.6.1. Under this legislation, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site *before* they make a decision on the planning permission.

1.6.2. Part 2, Section 40 confers on the planning authorities a duty to conserve biodiversity and states:

''*Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of biodiversity*''

Species of Principal Importance

1.6.3. Part 3, Section 41 requires the Secretary of State to ''*publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of* ***principle importance*** *for the purpose of conserving biodiversity*''.

1.6.4. This requirement lead to production of a list of species and habitats of Principal Importance. This lists includes all UK bats.

PLANNING POLICY

1.7. NATIONAL PLANNING POLICY FRAMEWORK

1.7.1. In March 2012 the Government introduced the National Planning Policy Framework (NPPF).

Chapter 11: Conserving and Enhancing the Natural Environment

1.7.2. Chapter 11: Conserving and Enhancing the Natural Environment replaces PPS 9: Biodiversity and Geological Conservation.

1.7.3. Chapter 11, Para 109 of NPPF states: ''The planning system should contribute to and enhance the natural and local environment by…minimising impacts on biodiversity and providing net gains in biodiversity where possible…including establishing coherent ecological networks that are more resilient to current and future pressures''.

1.7.4. Para 114 states: ''Local Planning authorities should set out a strategic approach in their local plans, planning positively for the creating, protection, enhancement and management of networks of biodiversity and green infrastructure''.

1.7.5. Para 117 gives guidance about how impacts on biodiversity and geodiversity should be minimised at a landscape scale by identifying and mapping components of local ecological networks and connecting them, and promotes the preservation, restoration and re-creation of priority habitats and ecological networks in relation to priority species populations, and specifies suitable indicators should be identified for the purposes of monitoring.

1.7.6. Para 118 states: ''When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- **if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;**

- **proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Sites of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted.** Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broad impacts on the national network of Sites of Special Scientific Interest;

- **Development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;**
    - opportunities to incorporate biodiversity in and around developments should be encouraged;
    - planning permission should be refused for development resulting in the loss or deterioration of habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss;
    - and the following wildlife sites should be given the same protection as European sites:

        - Potential Special Protection Areas and possible Special Areas of Conservation
        - listed or proposed Ramsar sites; and
        - sites identified, or required, as compensatory measures for adverse effects on European sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.''

ODPM CIRCULAR 06/2005: BIODIVERSITY AND GEOLOGICAL CONSERVATION

1.7.7. This document, to be read in conjunction with NPPF provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It makes

it clear that it is the intention of the government that local authorities and developers consider protected species at the earliest possible stage in the planning process. Any planning application that is likely to affect protected species should come with details of the surveys which have been undertaken and should include, if necessary, recommendations for mitigation. Applications which do not include sufficient data should be rejected.

APPENDIX B: Kent Bat Box

The Kent bat box

Simple to construct, self-cleaning and low maintenance.

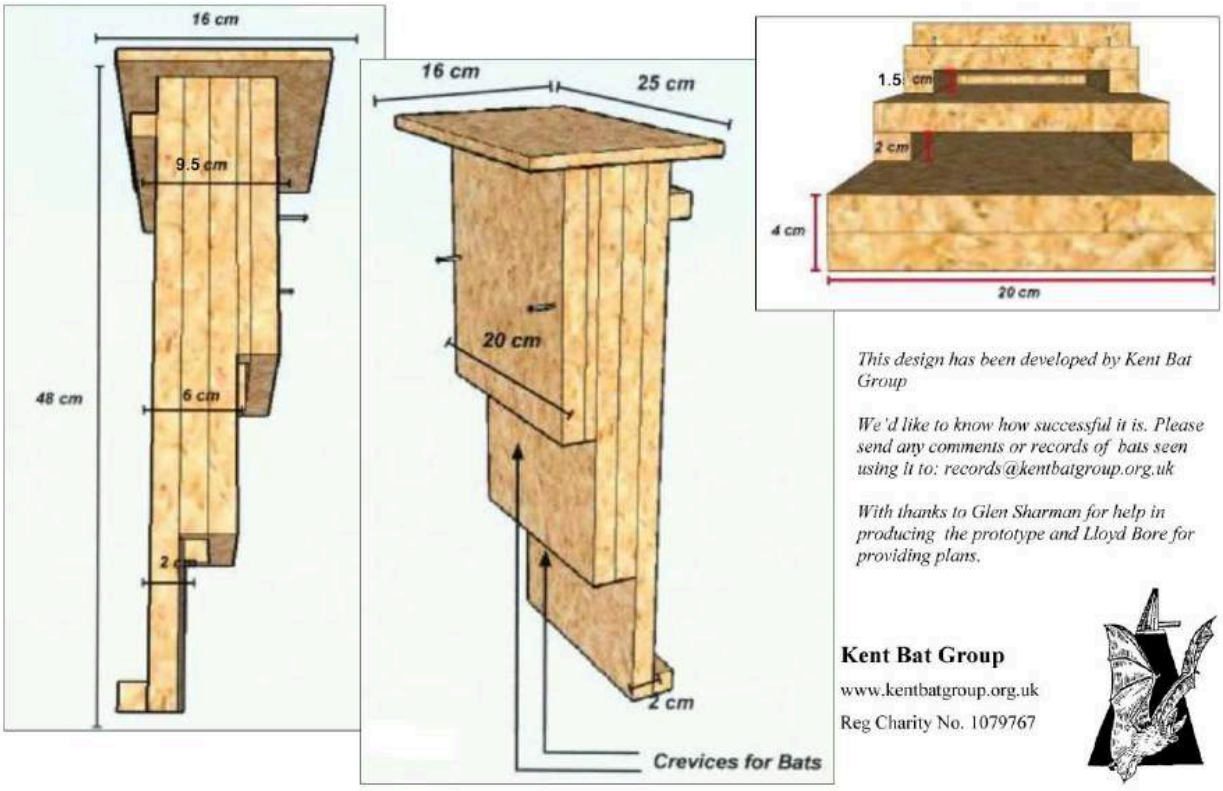
The only critical measurement is the width of the crevices—these should be no larger than suggested. Other measurements are approximate.

Materials and construction

Box to be made from untreated rough-sawn timbers
Timber should be c,20mm thick
The box should be rainproof and draught-free
Crevices can be between 15 and 25 mm wide
Fixing may be by use of brackets, durable bands or wires

Location

Boxes are best fixed as high as possible in a sheltered wind-free position, exposed to the sun for part of the day.
They can be fitted to walls, other flat surfaces or trees
A clear flight line to the entrance is important



This design has been developed by Kent Bat Group

We'd like to know how successful it is. Please send any comments or records of bats seen using it to: records@kentbatgroup.org.uk

With thanks to Glen Sharman for help in producing the prototype and Lloyd Bore for providing plans.

Kent Bat Group
www.kentbatgroup.org.uk
Reg Charity No. 1079767