

### Amendments/Additional Information

Amended layout of buildings/outside areas

Additional background information

Amended design

Revised access arrangements

Change of description of proposed development

Change in site boundaries

Other (as specified below)

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.....  
.....  
.....

**Bat, Breeding Bird and Barn Owl Survey**

**Thimbleby Shoot Hut**

**July 2017**



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Bat Survey: Thimbleby Shoot Hut

July 2017

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<b>Status</b>	<b>Date</b>	<b>Checked by:</b>
Final	05-07-2017	Giles Manners CEnv MCIEEM
Revisions		

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Bat Survey: Thimbleby Shoot Hut

July 2017

**Site:**

Thimbleby Shoot Hut  
Town End Wood,  
Thimbleby,  
Northallerton  
DL6 3PY

**Dates:**

Scoping survey: 3<sup>rd</sup> July 2017

Emergence survey: 3<sup>rd</sup> July 2017

**Client:**

Thimbleby Farms Ltd  
Estate Office  
Thimbleby Hall  
Thimbleby,  
Northallerton,  
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DL6 3PY

**Client's agent:**

Diane E. Baines  
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DL10 4BJ

**Planning Authority:**

The North Yorkshire Moors National Park Authority.

**Our ref:**

2017 - 339



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## Bat Survey: Thimbleby Shoot Hut

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### 1. Summary

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A bat, breeding bird and barn owl survey has been undertaken at Thimbleby Shooting Ground to support a planning application to demolish the shoot hut.

A scoping survey, found a low number of old bat droppings beneath one area of the ridge, however a later emergence survey has ruled out any current use of the building by bats. The low number of droppings found during the scoping survey, despite dry and undisturbed conditions when taken together with the results of the emergence survey, show that the identified crevice has been used by bats on a historic and / or transient basis.

The impact of the transient roost loss on the species will be negligible at all levels (site, local, and regional). No licence is required due to the absence of evidence of current or recent usage of the roost. To account for the low risk of bats being present during removal of the roof, a precautionary method statement is included within section 9. Replacement crevice roosting habitat will be provided on site through the installation of a professional quality bat box or bat brick on the replacement building or adjacent trees.

There was no evidence of use of the site by barn owl or breeding birds.



## Bat Survey: Thimbleby Shoot Hut

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### 2. Introduction

MAB Environment and Ecology Ltd was commissioned to carry out a bat, breeding bird and barn owl survey on a timber shoot hut at Thimbleby shooting Ground in North Yorkshire. (central grid ref: SE449947). The location of the site is shown circled in Figure 1. Plans have been submitted to the North Yorkshire Moors National Park Planning Authority for permission to demolish the existing building and construct a replacement (planning ref NYM/2017/0261/FL).

The report's primary objective is to provide an impact assessment for the development on bats, define any necessary mitigation proposals, and to assess the requirement for a Protected Species Licence. A secondary objective is to assess potential impact on breeding birds.

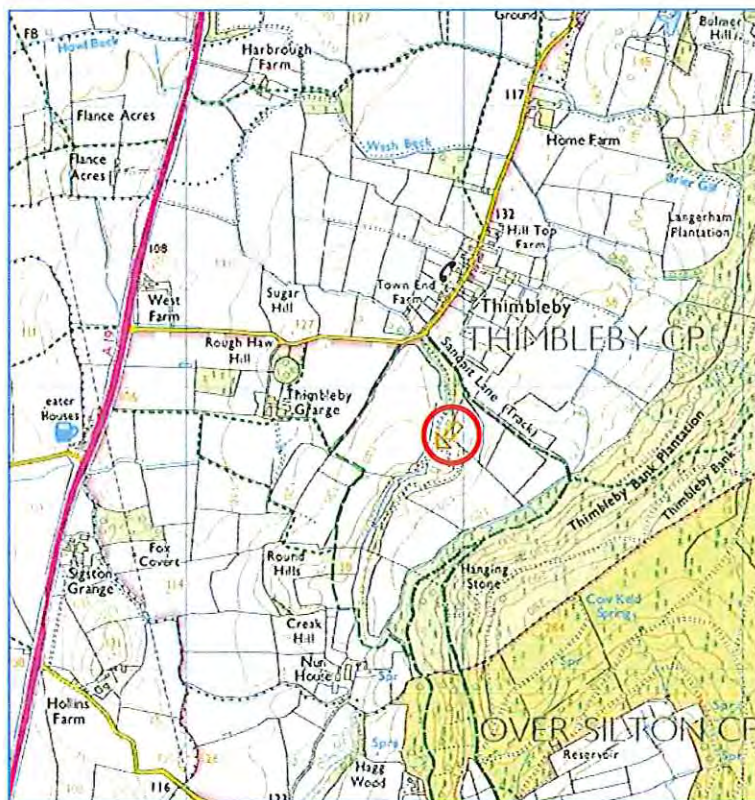


Figure 1: Site location.



## Bat Survey: Thimbleby Shoot Hut

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### 3. Methodology

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3.1 The site was surveyed by Emma Telfer GCIEEM, who has been an ecologist with MAB for three years, having previously worked as a bat surveyor with MAB for one year. She holds a Class Survey Licence WML-A34 (Bat Survey Level 2) registration number 2016-20709-CLS-CLS. Emma has received BCT training in surveying for bats and bat ecology and is also a trainee volunteer bat roost visitor She also holds a Class Survey Licence for great crested newts WML CL08 (Level 1) registration number 2016-19422-CLS-CLS

3.2 The interior and exterior of the building was inspected during the day using halogen torches (500,000 candle power), binoculars, ladders, and a flexible endoscope (a Sea Snake LCD inspection scope). All normal signs of bat use were looked for, including bats, bat droppings, feeding waste, entry and exit holes, grease marks, dead bats, and the sounds / smells of bat roosts.

3.3 The building was assessed for potential to support roosting bats. This includes assessing the building design, materials and condition. The location of the site and the surrounding habitat were also assessed for value to bats. This includes proximity of the site to good bat foraging habitat such as woodland and water bodies and if the site is linked to such habitats by linear features like hedgerows, woodland edges or rivers which bats use to commute around the environment.

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Colour code	Bat roost potential.	Roosting habitats	Commuting and foraging habitats
	Confirmed	Signs of roosting bats present (e.g. entry / exit points, accumulated bat droppings, visible bats).	
Red	High risk	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	<p>Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.</p> <p>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.</p> <p>Site is close to and connected to known roosts.</p>
Amber	Moderate risk	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only- the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	<p>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as a line of trees and scrub or linked back gardens.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</p>
Yellow	Low risk	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. Unlikely to be suitable for maternity or hibernation)	<p>Habitat that could be used by small numbers of commuting bats such as gappy hedgerow or unvegetated stream, but isolated, i.e. Not very well connected to the surrounding landscape by other habitat.</p> <p>Suitable but isolated habitat that could only be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.</p>
Green	Very low risk	All potential bat roost habitat <i>comprehensively</i> inspected and found to be clear of past or present bat usage.	
Grey	Negligible risk	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.

**Table 1: Guidelines for assessing the suitability of proposed development sites for bats. Adapted from BCT Bat surveys for Professional Ecologists, Good Practice Guidelines 2016.**

3.4 Bat roost records for a 2km radius around the site were commissioned from the North Yorkshire Bat Group.

3.5 An emergence survey was carried out by Giles Manners CEnv MCIEEM, of MAB Environment & Ecology Ltd. Mr Manners has been a professional bat ecologist since 2004, and has a Class Survey Licence WML CL20 (Bat Survey Level 4) registration number 2015-10306-CLS-CLS and also holds a Class Licence WML CL16 (Volunteer Bat Roost Visitor Level 2) – Natural England trainer license 2015-10305-CLS-CLS. He is also a zoologist of over 20 years' experience, a full member of the Institute of Ecology and Environmental Management and a Chartered Environmentalist. Equipment used was a Elekon Batlogger

## Bat Survey: Thimbleby Shoot Hut

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professional full spectrum bat detector and recorder. Recording were analysed with Bat Explorer.

3.6 All signs of breeding bird activity and barn owl (*Tyto alba*) activity were looked for. Signs looked for included white droppings, often vertical down walls or beams; active nests and nesting materials; (birds flying into and out of barns: generally summer only); bird feathers, particularly swift (*Apus apus*), swallow (*Hirundo rustica*) and house martin (*Delichon urbica*), bird corpses, feeding waste (including pellets), and the sound/smell of birds.

### 4. Constraints

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The surveys were not constrained.

### 5. Site Description

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The site is a one-storey detached timber building with a corrugated metal roof. The building was constructed in 1998. There is a small roof void present. There is no wall cavity present.



Photo 1: Survey building.





## Bat Survey: Thimbleby Shoot Hut

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### 6. Results

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#### 6.1 Desktop study

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The site offers potentially high quality foraging habitat for bats as it is situated within an area of deciduous woodland and it is also connected to larger areas of woodland to the east. The wider landscape is a mixture of arable fields and permanent pasture, bounded by low hedgerows. Scattered trees occur throughout the area.



Figure 2: Aerial view illustrating surrounding landscape.

#### Bat Records

Records from North Yorkshire Bat Group have been requested and will be appended upon receipt.

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### 6.2 Visual inspection

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Metal roof sheets are tight fitting. No potential access for bats is visible at the ridge. The roof has been sealed with rubber at the eaves, this has dropped out in a number of places. All gaps are cobwebby and no bat droppings are visible within gaps or in plastic guttering which is fitted tightly beneath this area. There are gaps present behind the timber soffit on both the north-west and south-east walls and the fascia on the north gable has lifted away from the wall. All gaps are cobwebby and no bat droppings were stuck to the walls beneath.

The internal void is dry and undisturbed. The space is small and cluttered due to the layout of roof beams. All beams are new, smooth, in good condition and tightly sealed. Insulation boards are fitted beneath the metal roof sheets. A small number of bat droppings, typical of pipistrelle bat species were present beneath one area of the ridge near the south gable wall. No scattered bat droppings were found within the void.

No signs of breeding birds were found during the survey and the buildings contain no suitable habitat for barn owl.



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Site photographs.



Photo 2: Building from south east.



Photo 3: Gap under roof at eaves.

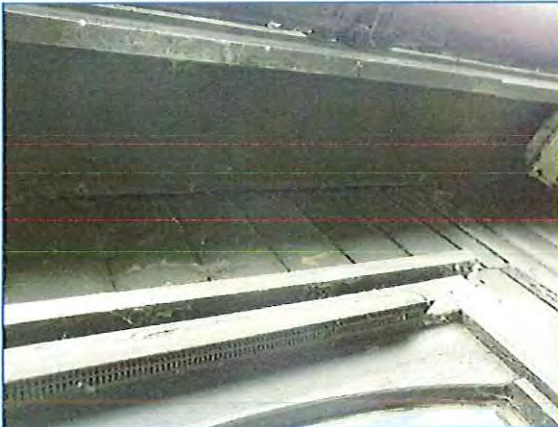


Photo 4: Gap behind soffit.



Photo 5: Gap behind fascia on north gable.



Photo 6: Cluttered roof void.



Photo 7: Bat droppings below central beam near south gable..

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### 6.3 Emergence survey

Conditions: start 17°C, dry, still, clear; end 14°C, dry, still, clear.

Timing: start 21.15; end 23.00; sunset 21.37.

Results summary: no bats detected until 22.10, when a single common pipistrelle arrived from the north and commuted across the site. Later (22.18 three individuals of the same species foraged and engaged in social flight (chasing etc) around the site until the end of the survey. There were no emergences and no other species detected.

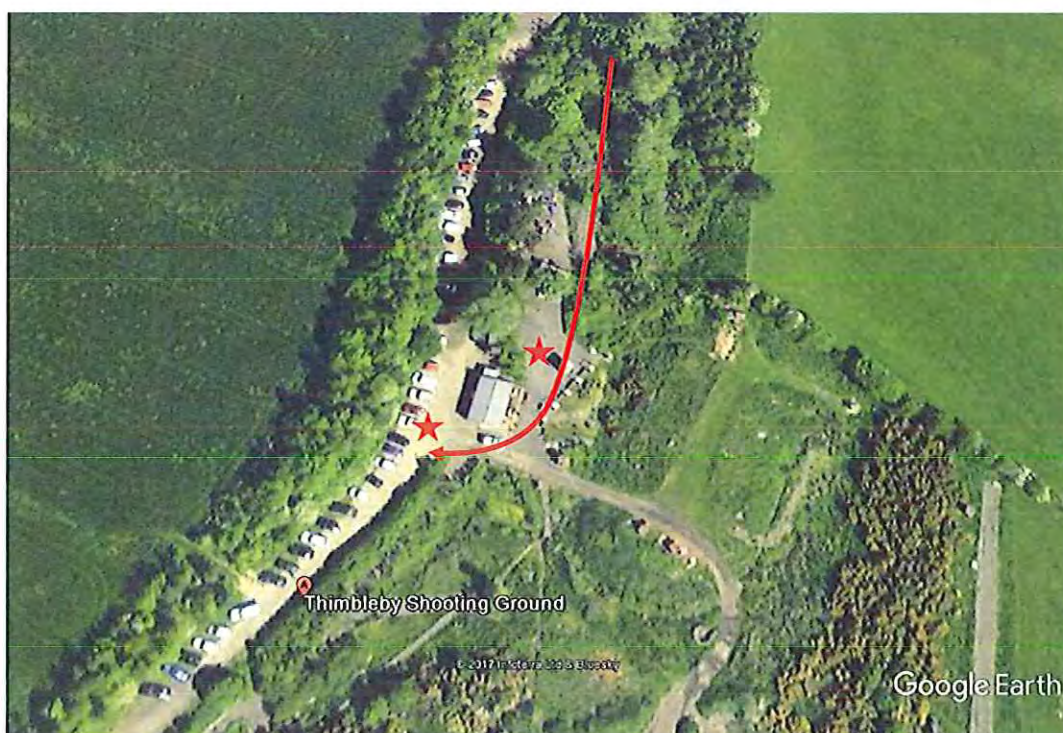


Figure 3 Surveyor locations and commuting bat direction (22.10)





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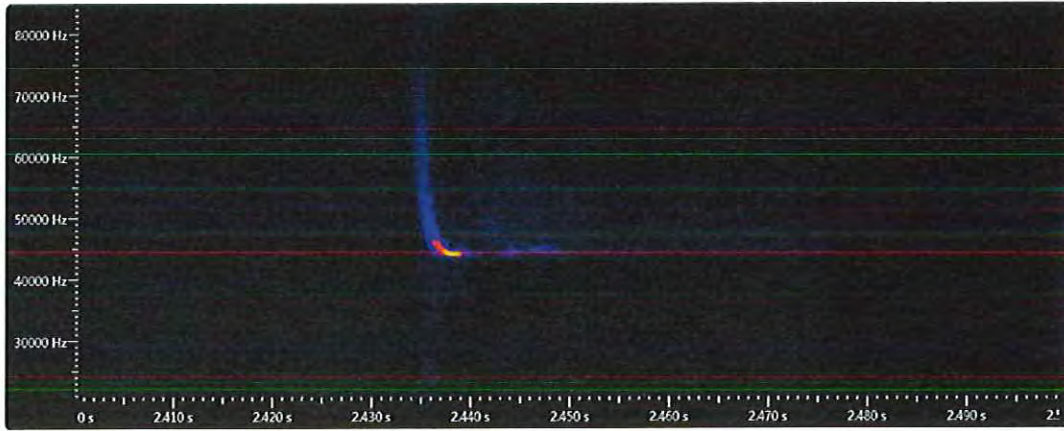


Figure 4 Spectrogram of recorded common pipistrelle at site at 22.15

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### 7. Discussion and analysis

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There is no evidence of any current use of the buildings by bats. Bat droppings found during the initial scoping survey were most likely as a result of a single male or non-mating female using the ridge beam as a transient roost in the past. The scoping survey found only a low number of bat droppings, despite very dry and undisturbed internal conditions inside the roof void, which are optimal for the preservation of such evidence. In addition, the design and materials used in the construction of the building provide very low quality bat roost habitat.

The building was not in use at the time of the emergence survey, despite the survey being carried out in good conditions and within the peak bat activity season. All potential bat access into the roof was easily inspected and none showed any signs of recent use. In addition, the timing of the arrival of the bats was later than we would expect from emerging bats, so it is likely these bats arrived from buildings to the north around the village or beyond.

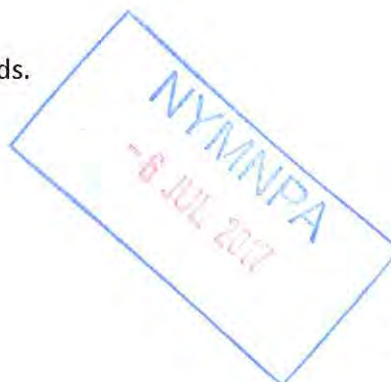
No signs of breeding birds were found during the survey and the buildings contain no suitable habitat for barn owl.

### 8. Impact assessment

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No impact on bats will result from the proposed development. The loss of a historic transient roost will have no impact on the species.

There will be no impact on barn owls or breeding birds.



## 9. Mitigation & Compensation

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### 9.1 Mitigation summary

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Due to the presence of a historic transient roost, it is recommended that removal of the roof will be carried out under the direct supervision of a suitably qualified and licensed ecologist (SQLE). If any bats are found, works will stop and the SQE will then advise concerning the need for a European Protected Species Licence. Works will remain on hold until any such survey / license is obtained.

To mitigate for the loss of potential transient roosting habitat, replacement crevice roosting habitat will be provided on site through the installation of a professional quality bat box or bat brick in a location agreed by the ecologist. This will ensure that the building and site continues to provide suitable summer and transient roosting habitat.

### 2 Method Statement

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1. A toolbox talk will be provided to the contractors prior to demolition.
2. Removal of the roof will be carried out under the direct supervision of a suitably qualified and licensed ecologist (SQLE).
3. If any bats are found, the SQE will immediately inform the builders and will stop works. The SQE will then advise concerning the need for a European Protected Species Licence, and works will remain on hold until any such survey / license is obtained.
4. To mitigate for the loss of crevices and to enhance the site, a professional quality Schwegler (Type 1FF) bat box or integral bat brick will be installed in a location on the replacement building or adjacent trees, as agreed by the ecologist.





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## 10. Information concerning bat protection and the planning system

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**10.1 Relevant Legislation.** All bat species are protected under the Wildlife and Countryside Act (WCA) 1981 (as amended), the Countryside and Rights of Way Act 2000 and the Habitat Regulations 2010.

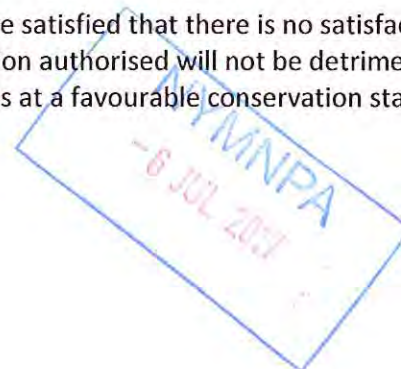
Under the WCA it is an offence for any person to intentionally kill, injure or take any wild bat; to intentionally disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection; to intentionally damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection; to be in possession or control of any live or dead wild bat, or any part of, or anything derived from a wild bat; or to sell, offer or expose for sale, or possess or transport for the purpose of sale, any live or dead wild bat, or any part of, or anything derived from a wild bat.

Under the Habitat Regulations 2010, it is an offence to (a) deliberately capture, injure or kills any wild animal of a European protected species (EPS), (b) deliberately disturb wild animals of any such species, (c) deliberately take or destroy the eggs of such an animal, or (d) damages or destroys a breeding site or resting place of such an animal. Deliberate disturbance of animals of a European protected species (EPS) includes in particular any disturbance which is likely to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young; or (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

*Prosecution could result in imprisonment, fines of £5,000 per animal affected and confiscation of vehicles and equipment used.* In order to minimise the risk of breaking the law it is essential to work with care to avoid harming bats, to be aware of the procedures to be followed if bats are found during works, and to commission surveys and expert advice as required to minimise the risk of reckless harm to bats.

**10.2 Licences.** Where it is proposed to carry out works which will damage / destroy a bat roost or disturb bats to a significant degree, an EPS licence must first be obtained from the Natural England (even if no bats are expected to be present when the work is carried out). The application for a license normally requires a full knowledge of the use of a site by bats, including species, numbers, and timings. Gathering this information usually involves surveying throughout the bat active season. The licence may require ongoing monitoring of the site following completion of the works.

Licences can only be issued if Natural England are satisfied that there is no satisfactory alternative to the development and that the action authorised will not be detrimental to the maintenance of the population of the species at a favourable conservation status in their natural range.





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**10.3 Planning and Wildlife.** The March 2012 National Planning Policy Framework (NPPF) has replaced PPS9 (Planning Policy Statement on Biodiversity and Geological Conservation) as the relevant national planning guidance in relation to ecological issues.

Para 109 of NPPF states that 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, contributing to the Government’s commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”.

Para 117 of NPPF states that the planning system should “promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species, populations, linked to national and local targets”.

Para 118 of NPPF states that “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 Site 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 broader 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 irreplaceable 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.

Para 119 of the NPPF makes it clear that “The presumption in favour of sustainable development (paragraph 14) does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or





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determined". Therefore EPS will still be a material consideration when considering sustainable developments.

The accompanying ODPM / Defra Circular 06/2005 remains pertinent; circular 06/2005 is prescriptive in how planning officers should deal with protected species, see paragraphs 98 and 99:

- The presence of a protected species is a material consideration when considering a proposal that, if carried out, would be likely to result in harm to the species or its habitat (see ODPM/Defra Circular, para 98)
- LPAs should consider attaching planning conditions/entering into planning obligations to enable protection of species. They should also advise developers that they must comply with any statutory species protection issues affecting the site (ODPM/Defra Circular, para 98)
- The presence and extent to which protected species will be affected must be established before planning permission is granted. If not, a decision will have been made without all the facts (ODPM/Defra Circular, para 99)
- Any measures necessary to protect the species should be conditioned/planning obligations used, before the permission is granted. Conditions can also be placed on a permission in order to prevent development proceeding without a Habitats Regulations Licence (ODPM/Defra Circular, para 99).
- *The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances.*

Further to NPPF and ODPM Circular 06/2005, Section 40 of the Natural Environment and Rural Communities Act (2006) states that '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 conserving biodiversity'. Section 40(3) also states that 'conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat'.





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## 11. References

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BS42020. Biodiversity - Code of Practice for planning and development. British Standards Institution 2013.

Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System.  
<http://www.communities.gov.uk/publications/planningandbuilding/circularbiodiversity>

Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3<sup>rd</sup> edn). The Bat Conservation Trust, London.

Mitchell-Jones, A.J. & McLeish, A.P. (2004). *Bat Workers Manual*. JNCC

Mitchell-Jones, A.J. (2004). *Bat Mitigation Guidelines*. English Nature.

National Planning Policy Framework:

<http://www.communities.gov.uk/documents/planningandbuilding/pdf/2116950.pdf>

The Conservation of Habitats and Species Regulations 2010.

<http://www.legislation.gov.uk/uksi/2010/490/contents/made>

UKBAP 1995. *UK Biodiversity Action Plan*. <http://www.ukbap.org.uk/>



## Appendix 1: Glossary of bat roost terms

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### *Bat Roost Definitions:*

**Day roost:** a place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.

**Night roost:** a place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.

**Feeding roost:** a place where individual bats or a few individuals rest or feed during the night but are rarely present by day.

**Transitional / occasional roost:** used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.

**Swarming site:** where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites.

**Mating sites:** where mating takes place from later summer and can continue through winter.

**Maternity roost:** where female bats give birth and raise their young to independence.

**Hibernation roost:** where bats may be found individually or together during winter. They have a constant cool temperature and high humidity.

**Satellite roost:** an alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.



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### **Appendix 2: Standard good working practices in relation to bats**

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Bats are small, mobile animals. Individual bats can fit into gaps 14-20mm wide. They can roost in a number of places including crevices between stonework, under roof and ridge tiles, in cavity walls, behind barge boards, in soffits and fascias and around window frames. Builders should always be aware of the potential for bats to be present in almost any small gap accessible from the outside in a building. The following guidelines are provided in order to reduce the risk of harm to individual bats.

- Roofs to be replaced, or which are parts of a building to be demolished, should be dismantled carefully by hand. Ridge tiles, roof tiles and coping stones should always be lifted upwards and not slid off as this may squash/crush bats.
- Re-pointing of crevices should be done between April and October when bats are active. Crevices should be fully inspected for bats using a torch prior to re-pointing.
- Any existing mortar to be raked should be done so by hand (not with a mechanical device).
- Look out for bats during construction works. Bats are opportunistic and may use gaps overnight that have been created during works carried out in the daytime.
- If any bats are found works should stop and the Bat Conservation Trust (0845 1300 228) or a suitably qualified bat ecologist should be contacted.

If it is necessary to pick a bat up always use gloves. It should be carefully caught in a cardboard box and kept in a quiet, dark place. The Bat Conservation Trust or a suitably qualified bat ecologist should be contacted.

