



Bat, Breeding Bird and Barn Owl Scoping Survey
Grove Farm, Goodmanham

June 2021

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Final	09-06-2021	Ione Bateau MCIEEM

Site:

Grove Farm
Goodmanham,
YO43 3HX

Dates:

Scoping Survey: 4th March 2021

Emergence survey: 1st June 2021

Client:

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Goodmanham,
YO43 3HX

Client's agent:

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Planning Authority: East Riding of Yorkshire Council

Our ref: 1086-2021

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1 Summary

A Bat, Breeding bird and Barn owl survey at Grove Farm, Goodmanham identified several areas of potential bat roost habitat and evidence to suggest that the building was being utilised as a feeding perch by low numbers of bats.

The subsequent emergence survey conducted during the optimal survey season in good weather conditions, identified a solitary brown long-eared bat roosting within the upper floor of the building. The bat was observed roosting on timber roofing trusses prior to the start of the survey, later emerging from the western aspect. No evidence was found to indicate that the building is being used by high numbers of bats – with only low densities of feeding remains identified and generally low levels of bat activity throughout the emergence survey. Therefore, use of the building in a maternity capacity by crevice or void dwelling species can be ruled.

As future works will likely result in the loss of a brown long-eared bat day roost and feeding perch, a European Protected Species Licence (EPSL) will likely be required before works can begin. Therefore, at least one additional bat activity survey, conducted during bat activity season (May-September) is required.

Bat roosts and potential roost habitat lost to future development will be mitigated for by the installation of one long lasting professional quality bat box. Integral habitat (Schwegler Type 1FR bat tube) incorporated into developments is preferred, however may not be suitable for conversion/renovations.

There is evidence of past use of the buildings by nesting birds (barn swallows & passerine species). Therefore, we recommend that works are timed to take place outside of bird nesting season (March -August). If this is not possible a pre-works check of the site should be undertaken before work commences to check for the presence of nesting birds. If any active nests are found, then work to those areas should be delayed until after any chicks have fledged. Two long lasting bird nest boxes should be installed on-site to mitigate for the loss of nesting habitat by future developments.

2 Introduction

MAB Environment and Ecology Ltd was commissioned by Mr. Tom Donohue to undertake a bat, breeding bird and barn owl scoping survey on a two-storey barn at Grove Farm, Goodmanham to accompany a planning application.

The site is located in Goodmanham village, north-east of Market Weighton town within the East Riding of Yorkshire (SE88764280). The location of the site is shown on Figure 1 below, and the application site boundary is shown in Figure 2.

The report was written by Jake Walker BSc (Hons) of MAB Environment and Ecology Ltd.

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.

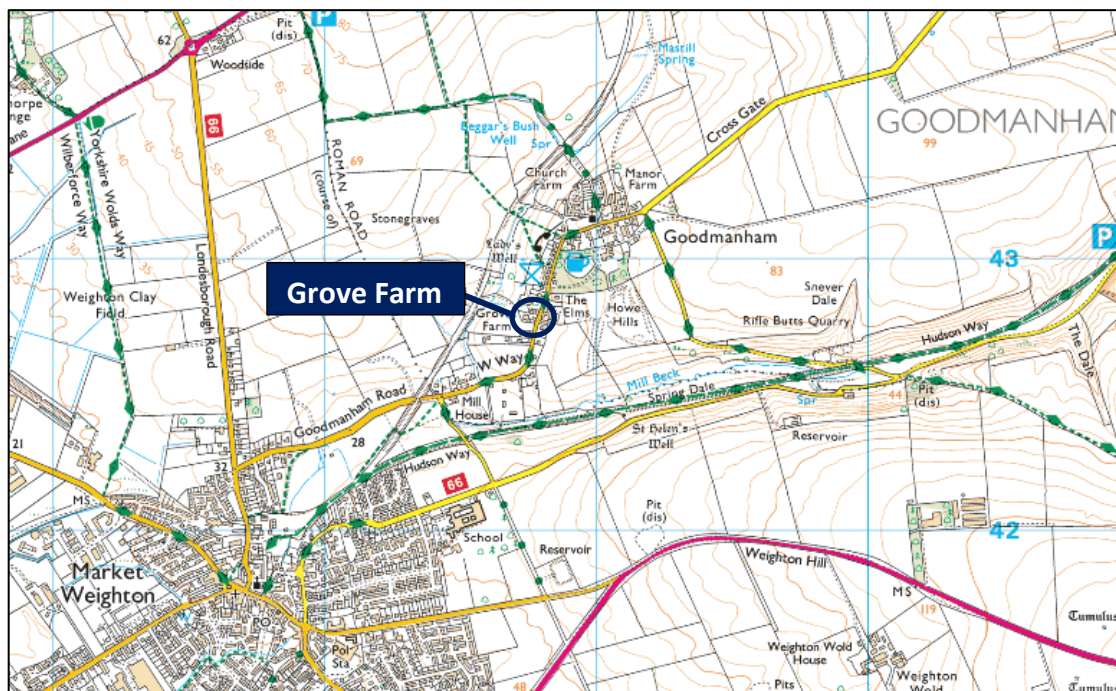


Figure 1: Site location.

Figure 2: Red line application boundary.

3 Methodology

3.1 Desktop Study

3.1.1 Bat roost records for a 2km radius around the site were commissioned from the North Yorkshire Bat Group (NYBG).

3.1.2 Aerial imagery from Google Earth and 'MAGIC' government website were used to assess the location of the site and the surrounding habitat 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.

3.2 Field Survey

3.2.1 The site was surveyed by Emily Ramsden and Jake Walker. The surveys were carried out in accordance with the Bat Conservation Trust, Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn).

- Emily is a Graduate Ecologist and has worked for MAB since 2018. She holds a Class Survey Licence WML-CL17 (Bat Survey Level 1) registration number: 2019-43961-CLS-CLS. She is a Qualifying member of CIEEM and has a BSc (Hons) in Biology from the University of Sheffield.
- Jake is a Graduate Ecologist and has been working MAB since 2020. He is a Qualifying member of CIEEM and has a BSc (Hons) in Ecology and Environmental Science from the University of Hull.

3.2.2 The interior and exterior of the buildings were inspected during the day using halogen torches (500,000 candle power) and ladders. 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.

3.2.3 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.

3.2.4 Other trees within the site and areas of vegetation were also assessed for value to bats and their importance as foraging and commuting habitat.

3.2.5 The buildings were assessed for their degree of potential to support roosting bats. This includes assessing the building design, materials and condition. See Table 1 for more information.

Colour code	Suitability.	Roosting habitats	Commuting and foraging habitats
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.
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).	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. 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.
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).	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. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
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.	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. 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. Site is close to and connected to known roosts.

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.

3.2.6 Emergence surveys were carried out using 2 surveyors with ultra-sound detectors (Pettersson D240x). The D240x detector was set to 10x expansion with manual triggering with an Edirol R09 WAV solid state recording device for the time expansion channel, with heterodyne output through the other channel.

3.2.7 Surveyors used were:

- Sarah Emerson Grad CIEEM (SE) has worked as an ecologist since 2015 and holds a Class Survey Licence WML-A34 (Bat Survey Level 2) registration number: 2016-26716-CLS-CLS.
- Nina Herbert (NH) has a BSc in Physical Geography and is employed by MAB as a seasonal ecologist.

Constraints

The surveys were not constrained.

4 Site Description

A traditional detached farmhouse with associated outbuildings. Survey effort will focus on the brick-built barn at the rear of the property. Surveyed buildings are fully described in section 6.



Figure 3: Overview of site, with surveyed building outlined.

5 Results

5.1 Desktop Study

The landscape surrounding the site is comprised predominantly of arable land, with deciduous woodland interspersed across the landscape. Arable land is generally sub-optimum for bats as it provides limited foraging opportunities. The surrounding deciduous woodlands will offer high-quality foraging habitat for bats, with bats utilising woodland fringes to forage. Fishpond Plantation (~230m west of the site) has several ponds within the woodland; these ponds will offer rehydration and increased foraging opportunities for bats. Linear features including Mill Beck and hedgerows provide good connectivity through the landscape. Mill Beck flows to the south of the site, its tributaries and riparian vegetation providing commuting corridors and increased foraging habitat for bats. Figure 4 shows an overview of the surrounding landscape.



Figure 4. Aerial view of the surrounding landscape.

6.1.2 Bat Group Records

Results of the East Yorkshire Bat Group (EYBG) record search found one record of bat activity relating directly to the site; the record is from 2000 and is for a feeding perch for brown-long eared bats. A low number of records were with the majority relating to the neighbouring town of Market Weighton. However, there are several roost records in the area, the most significant is for a maternity roost of 100+ common pipistrelles ~1km south of the site in Market Weighton in 2001. The records indicate a low species diversity in the surrounding area with only brown long-eared bats and common & soprano pipistrelles being recorded. Full results of the EYBG record search can be found below in table 2.

Date	Grid Reference	Site	Species	Record Type	Count
19/10/2005	SE 890 432	All Hallows, Goodmanham	Undetermined	Droppings	0
26/08/1994	SE 886 425	Fieldside Goodmanham	P pipistrellus	Nursery roost	19
25/07/2000	SE 888 428	Groves Farm, Goodmanham	Plecotus auritus	Feeding perch	0
28/08/1994	SE88 43	Goodmanham	P pipistrellus	Grounded	1
06/09/2009	SE 884 449	East Thorpe Wold Farm, Market Weighton	Plecotus auritus	Nursery roost	3
1995 -2001	SE 883 414	39, Langdale Rd, Market Weighton	P pipistrellus	Nursery roost	100 +
14/07/1993	SE 884 422	13, Springdale Rd, Market Weighton	P pipistrellus	Nursery roost	50
04/09/1995	SE 875 414	19, Wicstun Way, Market Weighton	Undetermined	Droppings	0
0/0/2012	SE 88662 41057	Mill Farm, Sancton Rd, Market Weighton	P pipistrellus	Summer roost x 3	3
16/06/2002	SE 884 418	54 Hill Rise Market Weighton	P pipistrellus	Grounded Bat	1
16/07/2010	SE 872 417	22 Northgate Vale, Market Weighton	P Pipistrellus	Grounded Bat	1
16/07/2008	Se 853 388	Linden House, River Lane, Market Weighton	P pipistrellus	Grounded Bat	1
08/08/2010	SE 881 413	2 Sancton Road, Market Weighton	P pygmaeus	Grounded Bat	1

Table 2: Results of the EYBG record search with significant records highlighted.

5.2 Visual Inspection



Figure 5. Visual inspection results.

Building ref.	Description	Potential bat roost habitat (PBRH)
<p>1 - Low potential risk of supporting bats</p>	<p>Two-storey brick barn with blue slate roof. Lower floor has open arches on west aspect. Trusses are timber and roof is lined with breathable membrane. Some gaps at ridge and at eaves.</p> <p>Scattered butterfly wings and 5 yellow underwing wings at north end may be feeding remains – indicative of bat activity. No bat droppings in undisturbed and cobwebby conditions.</p> <p>1x barn swallow and 1x other passerine type bird nest on lower floor.</p>	<p>Low PBRH between tiles and roof liner. Potential access at ridge and in some places at the eaves.</p>

Site Photographs



Photo 1: West aspect, open archways.



Photo 2: Bird nest on lower floor.



Photo 3: South gable.



Photo 4: Lower floor.



Photo 5: East aspect with lean-to building.



Photo 6: Gaps at gable end.



Photo 7: Upper floor internal construction.



Photo 8: Open vent on upper floor.

5.3 Emergence Survey

Date: 01/06/2021

Start time: 21:14

End time: 22:54

Sunset: 21:24

Table 1 – Environmental conditions

	Temp (°C)	Wind (mph)	Humidity (%rh)	Rain	Cloud cover (%)
Start	14	15mph	70	0	0
Finish	11	13mph	85	0	0

Surveyors: Sarah Emerson (SE); Nina Herbert (NH).

Equipment used: 2x Pettersson D240x time expansion ultrasound detectors with Edirol R09 recorders.

Results summary:

Bat activity was moderately low throughout the survey. A pre-survey inspection found a brown long-eared bat resting on a ridge beam inside the upper floor of the surveyed building ([Photo 9](#)). This solitary brown long-eared bat later emerged via an archway.

Roosts identified:

Building Ref.	Species	Count	Roost type	Emergence location/access point
1	Brown long-eared bat, <i>Plecotus auritus</i>	1	Day roost	Emerged from archway

Observations:

Surveyor	Time	Species	Number	Activity	Annotation
SE	21:00	Brown long-eared bat, <i>Plecotus auritus</i>	1	Pre-survey inspection. BLE roosting on ridge beam inside	★
NH	21:49	Common pipistrelle, <i>Pipistrellus pipistrellus</i>	1	Commuting	→
NH	21:53	Brown long-eared bat, <i>Plecotus auritus</i>	1	Emerged from archway	★ ¹ →
NH	22:00	Brown long-eared bat, <i>Plecotus auritus</i>	1	Foraging around archway	→

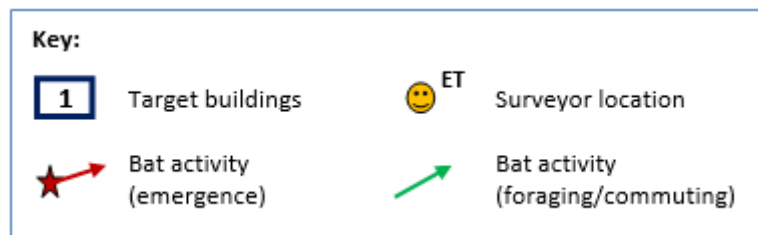


Figure 6 – Surveyor locations and bat activity recorded during survey 1 (01/06/2021).



Photo 9: Brown long-eared bat in the upper floor of surveyed building 02/06/2021. Photo taken by SE.

6 Discussion and Analysis

The emergence survey identified a solitary brown long-eared bat roosting within the upper floor of the surveyed building. The individual bat was identified during a pre-survey inspection, utilising roofing trusses close to the ridge to roost; the bat was then identified at later point emerging from the building via the open sided arches along the western aspect. As only a solitary brown long-eared bat was identified, it is likely that this was a single male, roosting separately from the maternity colony, and the building may be used as an occasional/transient roost sporadically throughout the year by individual bats.

No evidence has been found to indicate that the building is being used by high numbers of bats. The emergence survey conducted in optimum conditions during the optimal survey season, recorded generally low levels of bat activity, with only the solitary brown long-eared emerging, and sporadic commuting across the site by low numbers of common pipistrelles. Therefore, we can rule out use of the building by bats in a maternity capacity by both crevice and void dwelling species.

Conversion/renovation of the building will result in the loss of a brown long-eared bat day roost and feeding perch. Therefore, before works begin a European Protected Species Licence (EPSL) is likely to be required – this is dependent on the results of future surveys. At least one further emergence survey will be needed to complete assessment of the building and inform the need for a licence.

Inactive passerine and swallows' nest were identified within the lower floor of the building. There was no evidence of use of the building by barn owls.

7 Impact Assessment

Works to the building will likely result in the loss of a brown long-eared bat day roost and feeding perch. Table 4 highlights the impacts of bats from construction works.

Impact on bats	Impact on roosting habitats
Physical disturbance	Modification of access point to roost either physically or through, for example lighting or removal of vegetation.
Noise disturbance through, for example increased human presence or use of noise generating equipment.	Modification of roost either physically, for example by roof removal, or through, for example, changed temperature, humidity, ventilation or lighting regime.
Injury/mortality (e.g. in roost during destruction or through collision with road/rail traffic)	Loss of roost.

Table 3: Impacts on bats that can arise from proposed activities (from BCT survey guidelines 2016)

There is potential for the loss of bird nesting habitat (passerine species & swallows) if works are done to the lower floor of the building.

8 Mitigation & Compensation

8.1 Mitigation Summary

In order to reduce the risk of detrimental impacts upon bats and to ensure compliance with current wildlife legislation (see Section 11) it is likely that a European Protected Species Licence (EPSL) will be required before works to the building can begin. Further emergence surveys conducted during the optimal survey season will be required to complete assessment of the buildings/inform the EPSL.

Replacement bat roost habitat will be provided on site through the installation of one long lasting professional quality bat box. Integral habitat (Schwegler 1FR/2RF or equivalent) is preferable due to their increased longevity; however, they are not always applicable for conversion/renovation works. Therefore, if mitigation cannot be incorporated into future developments, bat boxes which can be affixed to external walls or trees on-site can be used (Schwegler 1FF/2F or equivalent).

We recommend that future works to the building should be timed to avoid bird breeding season. If this is not possible, a pre-works check should be made for active bird nests. If any active nests are present, then work to that area should be delayed until after the bird breeding season or once chicks have fledged to avoid disturbance. Two bird nest boxes should be installed on-site to mitigate for the loss of nesting habitat.

8.2 Method Statement

Bats

8.2.1 It is likely that future works to the building will require an EPSL, this is dependant on future surveys. If required, a full method statement and schedule of works will be specified within the EPSL application.

8.2.2 Prior to the commencement of any works to the building at least one additional bat emergence survey, in line with current Bat Conservation Trust Good Practice Guidelines will be carried at the appropriate time of year (May-August) and in suitable weather conditions. Bat survey results will be forwarded to the LPA.

8.2.3 Replacement crevice roosting habitat will be provided on site through the installation of 1 bat box. Integral habitat is preferable; bat bricks can include enclosed bat box 'B'; or Schwegler Type 1FR bat tube. If mitigation cannot be incorporated into the building, then 2 external bat boxes may be installed. External bat boxes should be Schwegler Type 1FF wall bat roosts which can be affixed to external walls.

Breeding birds

8.2.4 A pre-works check of the site should be undertaken before work commences to check for the presence of nesting birds. If any active nests are found, then work to those areas should be delayed until after any chicks have fledged.

8.2.5 Two bird nest boxes should be installed on-site. These should ideally be integral boxes within the new buildings. Examples include Schwegler sparrow terrace 1SP or brick sparrow box. They may also include swift boxes, e.g. ibstock swift box, Schwegler No. 16 or 1MF (bat and swift) which can be installed under the shelter of overhanging eaves.

9 Recommended Ecological Enhancement

To further enhance the ecological utility of the site for breeding birds, and open sided log shed (or similar structure) could be constructed as additional nesting habitat for barn swallows.

10 Information concerning bat protection and the planning system

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 Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

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 The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, 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.

10.3 Planning and Wildlife

National planning guidance for ecological issues is set out in the updated February 2019 National Planning Policy Framework (NPPF). The requirements are consistent with those specified in the July 2018 NPPF; which advocate biodiversity net gain and improvement where possible, as evidenced below.

Paragraph 174 refers to the requirement of plans to “protect and enhance biodiversity and geodiversity” In order to do this, “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.”

In paragraph 175 the NPPF indicates that “when determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity 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;
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact 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;
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.”

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 OPDM 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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Appendix 1: Glossary of bat roost terms

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.

Appendix 2: Standard good working practices in relation to bats

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.

