Bat, Breeding Bird and Barn Owl Scoping Survey

Burgate Farm, Harwood Dale

April 2016



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Status	Date	Checked by:	
Draft	19/04/2016	Ione Bareau MCIEEM	
Final			
Revisions			

2 7 APR 2015

Sites:

Burgate Farm Harwood Dale Scarborough North Yorkshire YO13 0DS

Dates:

Scoping survey: 13th April 2016

Scoping report: 19th April 2016

Client:

Mrs Cook Burgate Farm Harwood Dale Scarborough North Yorkshire YO13 0DS

Planning Authority:

North Yorkshire Moors National Park Authority

Our ref:

16-024

27 APR 2013

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1. Summary

A bat, breeding bird and barn owl scoping survey has been undertaken on a detached stone outbuilding at Burgate Farm, Harwood Dale.

A daytime building inspection and visual assessment in April has identified low potential bat roosting habitat within the building. There is no evidence of use of the building by any void dwelling bat species and there are limited roosting opportunities along the ridge and around roofing timbers.

The building does offer some suitable crevice roosting habitat due to internal crevices and gaps along the eaves. These areas could not be comprehensively inspected for signs of use during the scoping survey; a summer emergence survey is therefore required in order to complete the building assessment.

Barn swallows have nested within the building over previous summers; a check should be made prior to work for any active nests if work is to take place during the breeding season. The retention of other open-sided farm buildings on site will ensure that there is still provision for nesting barn swallows on site.

There will be no impact on barn owls.

2. Introduction

MAB Environment and Ecology Ltd was commissioned to carry out a bat, breeding bird and barn owl scoping survey on a stone barn at Burgate Farm in Harwood Dale, North Yorkshire. Planning permission is being sought for the conversion and extension of the building to provide new accommodation.

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.

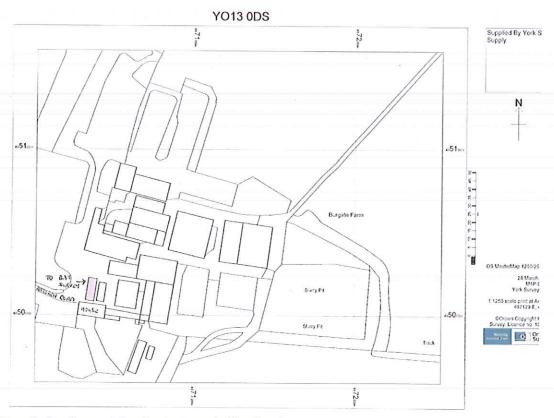


Figure 1 - Site plan as existing showing survey building in red.

3. Methodology

- 3.1 The building was surveyed and report written by Rachel Midgley MCIEEM, of MAB Environment & Ecology Ltd. Rachel has four years experience of conducting bat surveys, and has been an ecologist for eight years, previously with York City Council; she holds a Class Survey Licence WML-A34 (Bat Survey Level 2) registration number 2015-11726-CLS-CLS and also holds a class licence WML-A34 (Volunteer Bat Roost Visitor Level 1) registration number 2015-17135-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 its degree of 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.

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.	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.

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.
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 regular4 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
		To materiaty of indemation)	by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Green	Very low risk	All potential bat roost habitat comprehensively 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 Any trees within the site and areas of vegetation were also assessed for value to bats and their importance as foraging and commuting habitat.
- 3.5 Bat roost records for a 2km radius around the site were commissioned from the North Yorkshire Bat Group.
- 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

The surveys were not significantly constrained. Straw, animal waste and debris on the floor may obscure some evidence of bat use such as bat droppings and feeding remains.

5. Site Description

Burgate Farm is located in Harwood Dale near Scarborough, North Yorkshire (central grid reference: SE 970 950) within the North York Moors National Park. The site itself is a large dairy farm, surrounded by fields of permanent pasture. Within the wider area, there are extensive areas of woodland which offers high quality bat foraging habitat, within bat commuting distance.

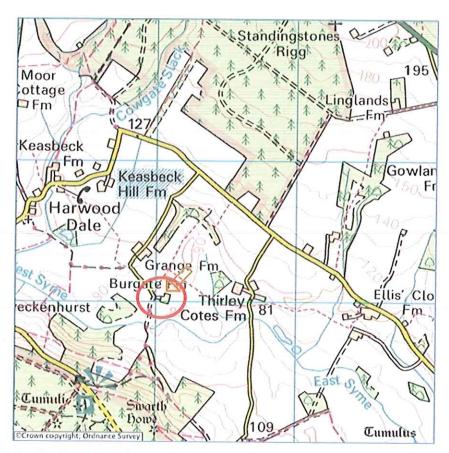


Figure 2 - Site location plan (1:50,000)



Figure 3 - Aerial image of the site and surrounding landscape.

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6. Results

6.1 Desktop study

North Yorkshire Bat Group (NYBG)

The North Yorkshire Bat Group was commissioned to provide any records they currently hold from a 2km search radius of the survey site. The results are included below in Table 2. The search has returned few records, relating to only three sites in the Harwood Dale area and none relate to Burgate Farm. The closest records are from of a farm 520m away which supports a Brown long-eared bat; Natterer's bat and common pipistrelle roost.

Table 2 - NYBG records:

Species	Site	Gridref	Quantity	Date	Comment
Unknown	Brooklands Farm, Harwood Dale	SE966963		17-Feb-04	? Roost
Natterer's Bat	Thirley Cotes Farm, Harwood Dale	SE9758195071		Aug-10	Roost
Common Pipistrelle	Thirley Cotes Farm, Harwood Dale	SE9758195071		Aug-10	Roost
Brown Long-eared Bat	Thirley Cotes Farm, Harwood Dale	SE9758195071		Aug-10	Roost
Natterer's Bat	Kirkless Farm, Harwood Dale	SE985938		Jul-10	Solitary bats roosting in various outbuildings
Noctule Bat	Kirkless Farm, Harwood Dale	SE985938		Jul-10	In flight
Common Pipistrelle	Kirkless Farm, Harwood Dale	SE985938		Jul-10	Solitary bats roosting in various outbuildings

6.2 Visual inspection

The survey building is a stone barn currently used as a store and an animal shelter. See Figure 1 for building location.

Within the first room (used as an animal shelter), the floor is covered with straw and animal muck which may obscure some signs of use by bats such as bat droppings or feeding remains. Within other parts of the building there are lots of stored items and surfaces are very dusty and undisturbed. No bat droppings were seen, but there are mouse and bird droppings (swallows).

There is an upper floor which has been put in fairly recently. Crevices are present around these timbers where they meet the internal walls. The main ridge beam is steel

and the roof has a modern breathable roofing membrane. No bat droppings were found on the upper floor.

External walls are well-pointed. The roof is also in very good condition having been reroofed recently. The tiles are in place and tightly fitted. All the lead flashing around
chimneys is sealed with no gaps and the concrete ridge line is well mortared. There are
gaps all along the eaves and at one corner on the western elevation (photo 6). There are
also some small gaps where timber cladding meets the external stone walls on the
western gable, and behind a timber fascia board, but this area does not appear to lead
into any void and was cobwebby (photo 7).

Overall, the building has low bat roosting potential.

A total of 17 swallow nests were seen inside the building during the scoping survey. There was no sign of use by barn owl.

Site photographs:



Photo 1 - Western elevation.



Photo 2 - View of the building from the north.



Photo 3 - Upper floor timbers. Crevices are present where timbers meet the internal walls.



Photo 4 - Lined roof and steel beam with swallows nesting along beam.



Photo 5 - Gaps along eaves on eastern elevation.



Photo 6 - Gap at corner at eaves level.

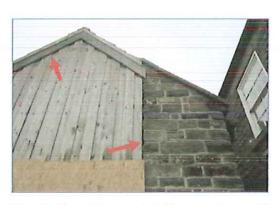


Photo 7 - Timber fascia and cladding to western gable, with crevices between timbers and stone work.

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7. Discussion and analysis

Following a daytime visual inspection, no signs of roosting bats have been found within the building.

Overall, the building has been assessed as providing low bat roosting potential. There is no evidence of use of the building by void dwelling bat species. The roof is supported by modern smooth sawn timbers and the main ridge beam is steel; therefore there are very limited opportunities for void dwelling bat species such as brown long-eared and Natterer's bat, and a lack of evidence internally, despite dry and undisturbed conditions on the upper floor, confirms absence of any bats roosting along the ridge.

There is some suitable crevice roosting habitat due to gaps along the eaves and around floor timbers of the upper floor, where these meet the internal walls. The roof is also lined, but is in very good condition having been re-roofed and re-lined in recent years, with no missing or raised tiles providing access into the cavity between the tiles and lining. Due to the location of some features, not all could be comprehensively inspected for signs of use by bats, and the amount of debris and animal manure on the lower floors may also obscure some evidence of use, especially by low numbers. For this reason, and to take account of this low risk bat habitat, it is recommended that a summer emergence survey is carried out in order to complete the impact assessment.

Nesting barn swallows have used the building over previous summers but door and window openings have been boarded to prevent further nesting. There are a range of other open-sided farm buildings on site which will continue to provide nesting opportunities for barn swallow. There was no evidence of use by barn owl.



8. Impact assessment

Proposed conversion work will result in the loss of low risk bat roosting habitat identified during the scoping survey.

Conversion of buildings will result in the loss of bird nesting habitat, and there is also a risk of disturbance to nesting birds if work is carried out during the breeding season and if active nests are present. There will be no impact on barn owl.

9. Mitigation & Compensation

9.1 Mitigation summary

A full mitigation scheme and method statement will be provided following the results of the summer emergence survey.

Emergence surveys should be carried out during the period May - August in order to gain a full understanding of the use of the site by bats and to assess the extent to which they may be affected by the proposed development.

The results of the summer surveys will inform the need for a European Protected Species Licence (EPSL) and the level of mitigation required. Mitigation may include timing of works, ecological supervision, and the retention or re-creation of bat roosting habitat.

If work takes place during the bird breeding season, then a check should be made prior to work for any active bird nests within buildings to be worked on. If nests are found, then no work to these immediate areas will take place until any chicks have fledged. Open-sided buildings are to be retained elsewhere on site which will enable the continued use of the site and surrounding area by nesting barn swallows.

9.2 Method Statement

- Emergence (or dawn re-entry) surveys shall be carried out at the appropriate time of year (May - August) and in suitable weather conditions using sufficient surveyors to ensure that all elevations of the building and potential roosting habitat are covered.
- The results of the emergence surveys shall inform the need for an EPSL. If an EPSL is required then no work to roost areas will take place until a licence has been obtained. Results of the emergence survey shall be forwarded to the LPA.
- A check should be made for active bird nests prior to works. If any active nests are discovered, work to these immediate areas shall be delayed until any chicks have fledged in order to avoid disturbance.

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 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.

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

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 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'.

11. Legislation in relation to barn owls

11.1 Barn owls are afforded full protection under the Wildlife and Countryside Act, 1981. Their inclusion in Schedule One protects against wilful disturbance whilst an owl is at or near the nest, and makes it an offence to carry out any of the following actions:

- Killing or injuring a barn owl
- Catching a barn owl
- · Taking or destroying any egg of a barn owl
- Damaging or destroying the active nest site with eggs or young or before eggs are laid
- Disturbing the dependent young of a barn owl
- Possessing, offering for sale or selling a barn owl (but see exceptions)
- Release or allow the escape of a barn owl into the wild (but see exceptions)

These actions are punishable by a maximum fine, upon conviction, of £5,000. Nesting has been recorded in every month of the year.

- **11.2** Protection is also given under the Countryside and Rights of Way Act, 2000 against reckless disturbance whilst nesting.
- 11.3 Because of recent declines in numbers, and concern over their current status, barn owls are also listed in the EC Birds Directive and Appendix II of the Bern Convention. They are an Amber Listed species in "Birds of Conservation Concern" (RSPB).



12. References

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

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

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

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

Hundt, L. (2012) Bat Surveys: Good Practice Guidelines, 2nd Edition. Bat Conservation Trust.

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/

RSPB (2009) Barn owls and the law:

http://www.rspb.org.uk/advice/law/barn owls law/index.aspx

The Barn Owl Trust (http://www.barnowltrust.org.uk/)

Barn Owl Trust (2012) Barn Owl Conservation Handbook, Pelagic Publishing, Exeter

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.